

Second Edition

The  
Mighty  
Mahseer

AND OTHER FISH  
OR  
HINTS TO BEGINNERS ON  
INDIAN FISHING

BY

*Skene Dhu*



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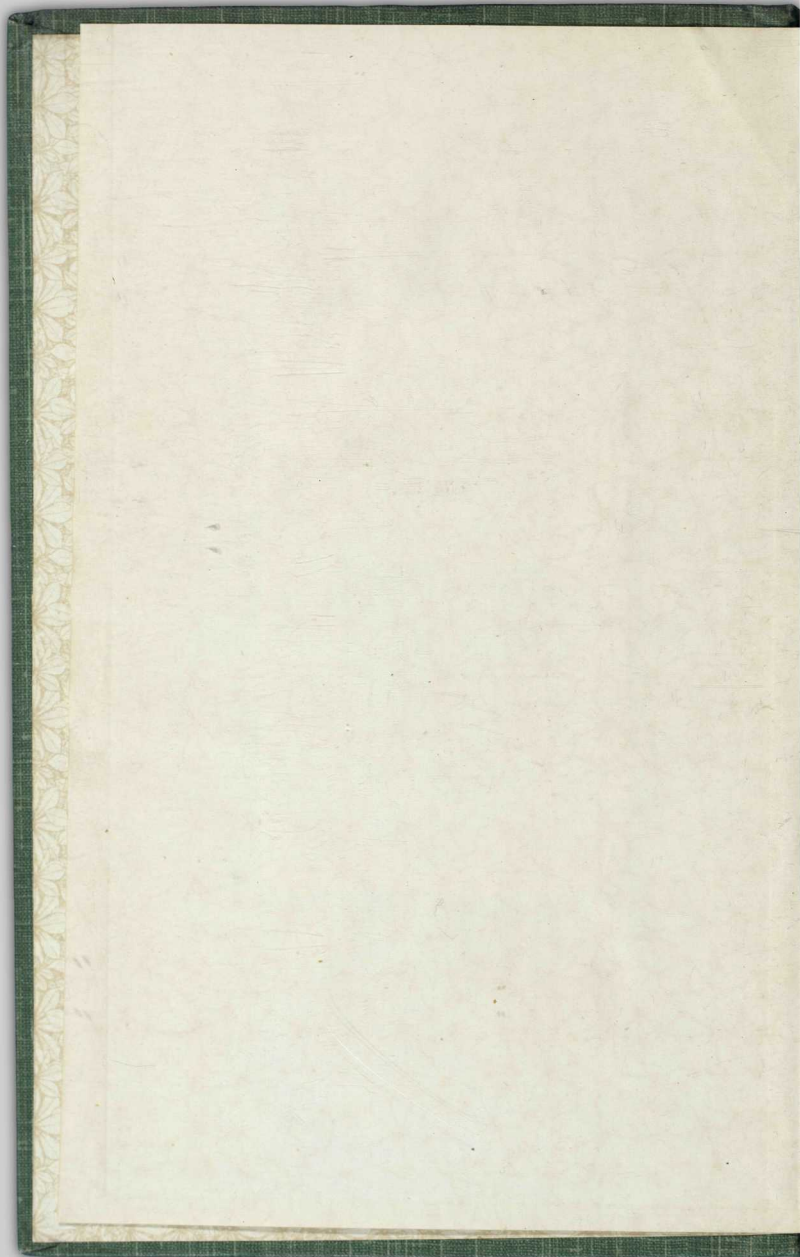
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# Rough map showing some of the Fishing localities in S. India.

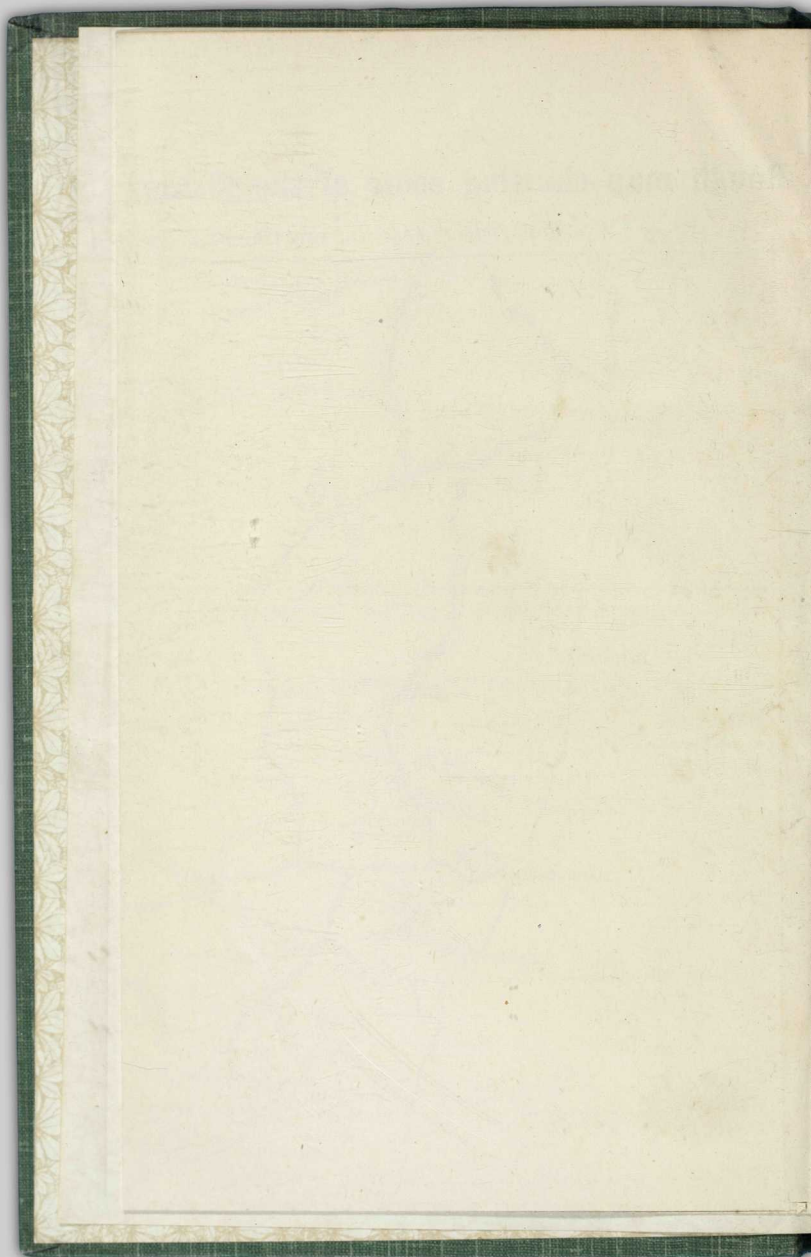
For fuller details, see Chapter on Localities.

SCALE:

1" = 80 MILES.









# THE MIGHTY MAHSEER

AND

## OTHER FISH;

OR

HINTS TO BEGINNERS ON

INDIAN FISHING.

BY

SKENE-DHU.

Second Edition.

Madras:

HIGGINBOTHAM & CO.

1906.

# The Mighty Malarkey

and

## Other Fables

HINTS TO READER

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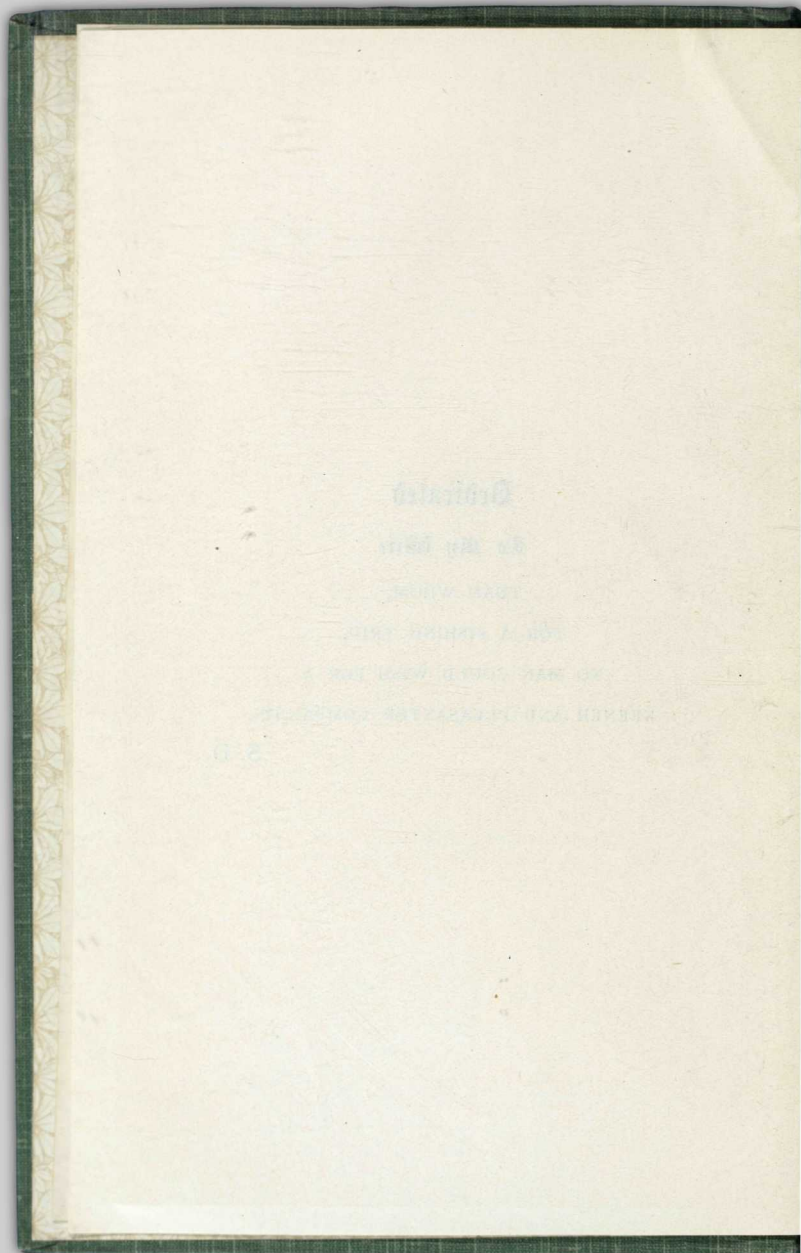
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**Dedicated**  
**To My Wife**

THAN WHOM,  
FOR A FISHING TRIP,  
NO MAN COULD WISH FOR A  
KEENER AND PLEASANTER COMPANION.

S. D.



## PREFACE TO FIRST EDITION.

I MUST commence by offering my humil lest apologies to a confiding public. My excuse is that I have waited long and patiently for some abler pen than mine to undertake this task, but my waiting has been in vain. Books on fishing—their name is legion; but of books on Indian fishing there are hardly any. The three best undoubtedly are:—Mr. H. S. Thomas' two excellent books: "The Rod in India" and "Tank Angling" (and to these two books I would recommend everyone to turn who wants much pleasant reading and real instruction on our Indian fish). And the "North Punjaub Fishing Club Anglers' Handbook" a most invaluable treatise to any fisherman going to the Punjaub, and useful also to any angler, wherever he may be in India. Also there is an excellent little work by Dr. Walker "Angling on the Kumaon Lakes." The above books should be in every Indian fisherman's library. But of the small and cheap books on angling which are so numerous and so helpful to the novice at home, out here there are none.

Well this little book does not profess to be an exhaustive treatise on Indian fishing, nor is it perhaps technically very accurate; it is simply composed from a few notes made by



the author and his friends, and its object is to tell the newcomer in India about some of the fish there are that he is likely to meet with, and how to set about catching them. No doubt many experienced anglers will condemn this small book as sketchy or not lucid enough; my advice then to young sportsmen will be, after having read this book, and we will hope, had their keenness aroused, to go to some of these critics and get from them a few practical hints both on fishing, and on local conditions, remembering that an oz. of practice is worth several lbs. of theory.

In view of the possible, though improbable, contingency of this little book reaching a second edition, the author would be very much obliged to brother anglers if they would write to him (through the publishers) pointing out any errors that they think needful of correction. Also any articles on local fishing, or on fish not included in this book, would be accepted with pleasure and inserted in a 2nd edition, if within the scope of this small work. And, in conclusion, I should like to add that the illustrations do not lay claim to any great technical accuracy; they are mostly from rough sketches made by the author and his wife, while others are copies of stuffed fish or plates in the Madras Museum.

SKENE-DHU.

## PREFACE TO SECOND EDITION.

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THE fact that this humble work has arrived at a 2nd edition, goes far to justify the contention set forth in the former preface, that some small and fairly cheap book on Indian fishing was required in this country. It has been pointed out to me by one or two friends that the 1st edition was too closely framed on the "*Rod in India*." For this I can only offer my fullest apologies to Mr. H. S. Thomas, and hope that he will forgive me; my great difficulty was to avoid falling into the phraseology of that most excellent book, knowing it as I do almost off by heart, as I know the Punjab Anglers' Handbook and Tank Angling also. I can only ask those critics who would blame me overmuch on this head, to pardon me for the following reasons: The book was not written for fame, being produced under a *nom-de-plume*, nor for profit, since the price at which the 1st edition was sold, makes it doubtful if the receipts will more than cover the cost of production. It was simply written for the

pleasure of writing about angling, at a time when one's rods had perforce to lie idle, and also with the sincere desire that it might be of some use to beginners, and to those to whom the difference between Rs. 3-8-0 and Rs. 8 or 11 was a genuine consideration. If in the following pages, I appear to refer more to the South of India than the North; it is for two reasons that I do so. First and foremost I have fished in many more rivers in Southern India than I have in the North, and secondly that excellent volume the North Punjab F. C. Anglers' handbook treats so fully of all fishing North of the Nerbudda, that to add more would be superfluous. It only remains in offering this second edition to the public, to tender my most cordial thanks to many friends for their kindly criticisms, and especially to express my gratitude to such as Major Molesworth, T. Farr, Esq. and F. T. Mitchell, Esq., for their kindness in giving readers the benefit of their experience on such matters as "Fishing in Andaman waters" and "Ceylon and Cashmere Trout Fishing," etc.

S. D.



## LIST OF ILLUSTRATIONS.

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- I The Mahseer.
- II The Carnatic Carp.
- III Barilius Bola.
- IV Barilius Bakeri.
- V The Black Spot.
- VI The Chilwa.
- VII The Butchwa.
- VIII Megalops.
- IX The Murrel.
- X Wallago Attu.
- XI Silundia Gangetica.
- XII The Goonch.
- XIII Labeo.
- XIV The Mirga.
- XV The Olive Carp.
- XVI Indian Gudgeon.
- XVII Notopterus Chitala.
- XVIII Notopterus Kaporat.
- XIX Etroplus Surattensis.
- XX The Bamin.
- XXI The Nair Fish.
- XXII Spoons, Live-bait flight and Spinner.
- XXIII Scale of Hooks.
- XXIV Float, Knot and Line-splicing.
- XXV Crocodile Spinner, Jardine Tackle, Nottingham  
Float and Bindings.

# LIST OF ILLUSTRATIONS

|         |                       |
|---------|-----------------------|
| I       | Frontispiece          |
| II      | The Temple of Solomon |
| III     | The Temple of Solomon |
| IV      | The Temple of Solomon |
| V       | The Temple of Solomon |
| VI      | The Temple of Solomon |
| VII     | The Temple of Solomon |
| VIII    | The Temple of Solomon |
| IX      | The Temple of Solomon |
| X       | The Temple of Solomon |
| XI      | The Temple of Solomon |
| XII     | The Temple of Solomon |
| XIII    | The Temple of Solomon |
| XIV     | The Temple of Solomon |
| XV      | The Temple of Solomon |
| XVI     | The Temple of Solomon |
| XVII    | The Temple of Solomon |
| XVIII   | The Temple of Solomon |
| XIX     | The Temple of Solomon |
| XX      | The Temple of Solomon |
| XXI     | The Temple of Solomon |
| XXII    | The Temple of Solomon |
| XXIII   | The Temple of Solomon |
| XXIV    | The Temple of Solomon |
| XXV     | The Temple of Solomon |
| XXVI    | The Temple of Solomon |
| XXVII   | The Temple of Solomon |
| XXVIII  | The Temple of Solomon |
| XXIX    | The Temple of Solomon |
| XXX     | The Temple of Solomon |
| XXXI    | The Temple of Solomon |
| XXXII   | The Temple of Solomon |
| XXXIII  | The Temple of Solomon |
| XXXIV   | The Temple of Solomon |
| XXXV    | The Temple of Solomon |
| XXXVI   | The Temple of Solomon |
| XXXVII  | The Temple of Solomon |
| XXXVIII | The Temple of Solomon |
| XXXIX   | The Temple of Solomon |
| XL      | The Temple of Solomon |
| XLI     | The Temple of Solomon |
| XLII    | The Temple of Solomon |
| XLIII   | The Temple of Solomon |
| XLIV    | The Temple of Solomon |
| XLV     | The Temple of Solomon |
| XLVI    | The Temple of Solomon |
| XLVII   | The Temple of Solomon |
| XLVIII  | The Temple of Solomon |
| XLIX    | The Temple of Solomon |
| L       | The Temple of Solomon |

## CONTENTS.

|                                                    | PAGE |
|----------------------------------------------------|------|
| <b>CHAPTER I.</b>                                  |      |
| On Sport generally and Fishing in particular ...   | 1    |
| <b>CHAPTER II.</b>                                 |      |
| Table of Fish mentioned ...                        | 4    |
| <b>CHAPTER III.</b>                                |      |
| The Mahseer ( <i>Barbus Tor</i> ) ...              | 8    |
| <b>CHAPTER IV.</b>                                 |      |
| The Carnatic Carp ( <i>Barbus Carnaticus</i> ) ... | 29   |
| <b>CHAPTER V.</b>                                  |      |
| The Lesser Fly-takers ...                          | 39   |
| <b>CHAPTER VI.</b>                                 |      |
| Megalops Cyprinoides ...                           | 44   |
| <b>CHAPTER VII.</b>                                |      |
| The Murrel ( <i>Ophiocephalus Striatus</i> ) ...   | 50   |
| <b>CHAPTER VIII.</b>                               |      |
| The Siluridae ...                                  | 55   |
| <b>CHAPTER IX.</b>                                 |      |
| Float-fishing ...                                  | 58   |
| <b>CHAPTER X.</b>                                  |      |
| Estuary Fishing ...                                | 68   |



**CHAPTER XI.**

|                                                              | PAGE |
|--------------------------------------------------------------|------|
| Trout Culture in Ceylon, Cashmere and on the Nilgiris ... .. | 78   |

**CHAPTER XII.**

|                                  |     |
|----------------------------------|-----|
| Fishing in Andaman Waters ... .. | 119 |
|----------------------------------|-----|

**CHAPTER XIII.**

|                      |     |
|----------------------|-----|
| Odds and Ends ... .. | 125 |
|----------------------|-----|

**CHAPTER XIV.**

|               |     |
|---------------|-----|
| Tackle ... .. | 148 |
|---------------|-----|

**CHAPTER XV.**

|                     |     |
|---------------------|-----|
| Useful Hints ... .. | 182 |
|---------------------|-----|

**CHAPTER XVI.**

|                   |     |
|-------------------|-----|
| Localities ... .. | 200 |
|-------------------|-----|

**CHAPTER XVII.**

|                                     |     |
|-------------------------------------|-----|
| Destruction of Fish in India ... .. | 239 |
| Diary forms, Notes, etc. ... ..     | 243 |
| INDEX ... ..                        | 257 |



## EXTRACTS FROM REVIEWS ON 1st EDITION.

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Skene Dhu in introducing this little book, for despite its comprehensiveness it only runs into about 90 pages, is wise in two ways. To begin with it places a book on the Indian market upon a subject on which there have been far too few written, etc.....the prints naturally afford a very material assistance to the "amateur" "float flinger" who practising "heaving the lead" in Indian streams, tanks, etc., may often capture something that he has never seen before, and of which he knows as much of the name as Potiphar's daughter knew of the names of the fishes swimming round Moses' watery cradle.....The Mighty Mahseer practically deals with all the fish likely to be hooked in India, and the baits to be used for each, and with the times to corpse him, and manner of bringing him safely to bag.....everything is put down so simply but at the same time so concisely, that he would be a very very big expert indeed that could not learn something from the book. ....*The Asian*.

Skene Dhu, a well-known writer on Indian sport, has just brought out a book on Indian fish.....  
...Twenty-two different species of fish are described, and of almost all these are illustrations given .....For the benefit of those who

cannot get to the haunts of the Mighty Mahseer, the author shows how very good fun may be had in the smaller tanks, etc. .... Through all anecdote is skilfully blended with sound practical advice. .... In the last chapter of all Skene Dhu deals with the destruction of fish in India. .... The only remedy would be the appointment of an Inspector of Indian Fisheries, as we have advocated before. The suggestion is not an extravagant one. .... and we hope that it will not be long before it receives the attention it deserves; and in conclusion we have no hesitation in saying that "The Mighty Mahseer and other Fish" is a book that no Indian angler should be without.—*The Madras Mail*.

This excellent work on the gentle pastime, beloved of yore by the tender-hearted Izac Walton, contains no less than 24 illustrations. .... It is essentially a book to be well read and studied by the angler who desires to snare the wily fish in his native haunts. .... It is very nicely and lightly written, and is as full of hints on all points connected with bait, water, etc., as a fish is of roe. .... The chapter on Tackle is very useful, and indeed the entire book is an excellent one and will interest and amuse even those stay-at-homes who have no intention of going a-fishing. —*Rangoon Times*.

A new and most acceptable work on Indian fishing to anglers in this country, has recently



been published by Messrs. Higginbotham & Co., Madras. . . . . The information supplied is complete, and the work in every way worthy of finding a place in every angler's bookshelf. The get up of the book is excellent, and both author and publisher are to be congratulated on the result of their labours.—*The Indian Planters Gazette*.

We have received this book on Hints to Beginners in Indian Fishing. . . . . It is written in a charming style, by one who loves the sport, and would be glad to see it more patronised in this country where far better and finer opportunities for it exist for the average European, than many of the other kinds of shikar, on which they spend more time and more money for smaller results. His advice as to where to go, and what to use in the way of tackle, bait, etc., will be found exceedingly valuable to the neophyte, who usually has to find out these things for himself after many disappointments and failures.—*Indian Review*.

We do not know who the author of this excellent little book is. . . . . its pleasant breezy style carries a brother piscator along contentedly enough from cover to cover. But to those who have hitherto neglected what is evidently a grand pastime, the volume is an excellent handbook, and not a few of his readers will cry "Almost thou persuadest me to be a fisherman."—*Madras Times*.

Skene Dhu has brought out a handbook . . . . .

which gives hints to fishermen beginning the interesting but often deceitful pastime of angling in Indian waters.....There are 24 full-page illustrations in this book, and its price is Rs. 3-8-0.....Skene Dhu makes out a very good case for the protection of fish, both from the point of view of the sportsman and of the food supply. His book should assist many to enjoy playing the Indian fish, and to find that angling has joys that are not inferior to more active sports.—*The Bombay Gazette*.

I have read with great interest and pleasure the above little book of "Hints to Beginners on Indian Fishing." It is written throughout in a true nature-loving, keen sportsman style and is well-worth a place in every Fisherman's library, for not only are the hints invaluable to all beginners, but many of them will be greatly appreciated by even the oldest angling experts in the East.—*Piscator*.—*The Ceylon Observer*.

## CHAPTER I.

### ON SPORT GENERALLY AND FISHING IN PARTICULAR.

OUT of all the young men who come to India for the first time how many bring out a rod? Almost all bring out guns or rifles with keen ideas of the sport to be their's when first they get leave, but for every twenty that bring out a gun, perhaps only one brings out a rod. And yet many of these men were keen enough fishermen at home. With some, it is the idea that having tasted the joys of salmon or trout fishing at home, there can be nothing here worthy of their skill. With others it is mere ignorance. No one has told them of the fine fish to be caught, while many have told them varied and exciting tales of tigers, bison and deer, and of the joys of pig-sticking. Personally I have been lucky enough to have had experience of most of the above sports, and—well comparisons are odious. There is a wild joy in being on a good horse, with a game old boar in front, and one lives a lifetime during that stern chase, and then that glorious moment when after many jinks and escapes, yours, the first spear, goes well home, in a foe who is truly worthy of your steel.

Then again is the moment of pure and holy joy that steals over one, when after following the tracks of a bison through dense jungle for the better part



of the day, suddenly the old solitary bull appears before one, head in air sniffing the breeze and suspicious of danger, but not knowing where to look for it. Then your rifle rings out, he falls, rises again, and once more goes down to your second barrel, and a minute after you are admiring the massive frame, and splendid proportions, of perhaps the finest animal India has to offer in the way of "big game."

But there is a joy of another sort, not to be beaten in pleasure and excitement by either of the foregoing two, and a joy that has this added recommendation—you may feel it several times in one day. And that is the joy of running a big fish. There are few keen anglers out here who have not experienced the delightful thrill which comes, when after half a dozen blank casts in a promising looking rapid, there comes that sudden tautening of the line, and a second after "the bend of the rod and the scream of the reel" tells him he is into a real good fish. There is a thrill in that feeling unsurpassed in any other sport.

And then there is a charm in the scenery, which adds a great deal to one's enjoyment. The never-ceasing roar of the rapid, the cool splash of the water, and the vast solitude of the jungle all around you; verily a man must be hard to please if he does not appreciate the calm and peace of nature which comes as such a welcome change, after the hurry and bustle of life in a big Indian cantonment. But even for those who cannot get to the haunts of the mighty Mahseer, and his lesser brothers, very good sport may be had in the tanks which abound in some

parts of India, notably in parts of Bengal, and the southern parts of the Madras Presidency. In the North one gets the Mirga and the Rohu, in the South the White Carp and the Labeo, while the Murrel and Wallago Attu are common to both. And there is a charm about float fishing too, though one is very prone to despise it. Who can deny a slight quickening of the pulse, when, after watching an immovable float for perhaps twenty minutes, it suddenly gives a few quick bobs, and disappears from your sight. But alas it is not often that you will get such good honest biting from an Indian fish. But this subject we will treat of more fully later on; in the chapter devoted to these fish.

At the end of description of most fish I have noted a few points, reference scales, etc.,—with either “Day” or “Beavan” as my authority,—which may help anglers in determining nomenclature of their captures in doubtful cases. For definitions of terms see Chapter XIII, also Index under “Definition, etc.” The scientific names I have used for the various fish, are those used by Dr. Day.



## CHAPTER II.

### TABLE OF FISH MENTIONED.

**I**N this chapter I will enumerate briefly the fishes dealt with in the following pages, giving the distribution and sizes. I note down herewith also a few vernacular names of the various fishes ; I fear however, that speaking generally they will seldom be found of much use, as every district and every river seems to have its own name or pronunciation thereof.

#### THE MAHSEER (*Barbus Tor*).

Found generally throughout India and Burma, running up to 200 lbs. in weight. Hind. "Mahasir;" Tamil "Kendi" (carp); Canarese "Haral meen;" Marathi "Kadchi."

#### THE CARNATIC CARP (*Barbus Carnaticus*).

Found generally throughout the Madras Presidency, also in the Western Dooars. Attains to 25lbs. in weight Hind "Gid Kaoli;" Tamil "Sal kendi;" Canarese "Gidpakle."

#### BARILS.

Of the genus *Barilius* there are some fourteen different species in India. Most of them run only to about six inches in length. However one, "*Barilius Bola*" the Indian trout, attains one foot in length.



**THE BLACKSPOT (*Barbus Mahecola*).**

Found in Southern India, runs to six inches in length. Tamil "Kendi" with various prefixes.

**THE CHILWA (*Chela*, etc.).**

There are some ten species of this fish distributed throughout India. They run from six to nine inches in length. Hind. "Chilwa;" Tamil "Vellachi Kendi."

**THE BUTCHWA (*Pseudeutropius Garua*).**

North India generally; runs to two feet in length.

**MEGALOPS CYPRINOIDES.**

Throughout India; runs to two feet in length. Tamil "Moran Kendi;" Mal. "Cunnay."

**THE MURRAL (*Ophiocephalus Striatus*).**

Found throughout India and Burma, attaining three feet in length. Hind. "Murrál and Sowl;" Tamil "Verál;" Marathi "Sohr."

**WALLAGO ATTU.**

Found throughout India and Burma, attaining six feet in length. Beng. "Boyari;" Tam. "Walah."

**BAGARIUS YARELLII (*Goonch*).**

Found throughout India and Burma, attaining six feet in length. Hind. "Goonch."

**SILUNDIA GANGETICA.**

Found throughout India and Burma, attaining six feet in length. Beng. "Silund."

**LABEO (*Labeo Calbasu*).**

Found in rivers and tanks throughout Southern India, and attains three feet in length. Beng. "Kalbasu;" Can. "Kurri meen;" Tam. "Ven kendi."

**ROHU (*Labeo Rohita*).**

Found in rivers and tanks throughout Northern India and Burma, and attains three feet in length. Beng. "Rohi."

**MIRGA (*Cirrhina Mrigala*).**

Found in rivers and tanks of Northern India and Burma, and attains three feet in length. Beng. "Mrigala and Mirga."

**WHITE CARP (*Cirrhina Cirrhosa*).**

Found in rivers and tanks of Southern India, and attains one and a-half feet in length. Tam. "Veng kendi."

**OLIVE CARP (*Barbus Chrysopoma*).**

Found in rivers and tanks of Central and Southern India, and attains about one and a-half feet in length. "Barbus Sarana" found in Northern India.

**NOTOPTERUS CHITALA (*Seetul*).**

Found generally in Northern India, and attains four feet in length. Beng. "Chitala;" Assam "Seetul."

**NOTOPTERUS KAPIRAT.**

Found throughout India, and attains two feet in length. Punj. "Moh Parri;" Tam. "Chota Wahlah."

**INDIAN GUDGEON (*Gobius Giuris*).**

Found throughout India and Burma, and grows to one and a-half feet in length. Hind. "Gulu," Tam. "Ulave."

**ETROPLUS SURATENSIS.**

Found in Central India and South to Ceylon; runs up to 2 lbs. in weight.

**GENUS MACRONES (*Cat-fish*).**

There are some eighteen species of this genus, some of which attain to great size, 6' in length. Perhaps the two best known are *M. Seenghala* and *M. Punctatus*. Some of them are to be found all over India and Burma. Punj. "Tengara;" Beng. "Singala;" Sind. "Singharee;" Tam. "kelete" (with various prefixes).

**BAMIN (*Polynemus Tetradactylus*).**

Habitat-Seas of India, ascending estuaries in search of food; attains 25 lbs. in weight. Tam. "Polun Kala;" Mal. "Yeta."

**NAIR FISH (*Lates Calcarifer*).**

Found in seas and estuaries of India, and runs to over 60 lbs. in weight. Beng. "Begni;" Mal. "Nair meen;" Tam. "Koduwa;" Sind. "Dungara."

**LUTIANUS ROSEUS (*Red Perch*).**

Seas and estuaries of India, runs to at least 5 lbs. in weight.

**SEER (*Cybiium Guttatum*).**

Seas of India and China, grows to six feet in length.



### CHAPTER III.

#### THE MAHSEER (*Barbus Tor*).\*

THE Mahseer – what a name to conjure with, and what recollections he awakes in the hearts of those who have been so fortunate as to have seen something of him.

Was it not Dr. Johnson who defined fishing as “a stick and line, with a fool at one end, and a worm at the other”? Well let scoffers think so. As a fisherman and an Englishman, however, one is always taught to believe, that given yourself at one end of the rod and a salmon at the other, the summit of human bliss is reached. And this being India, substitute Mahseer for Salmon, and there you are, still at the summit of human bliss. It is I know a much disputed subject, given weight for weight, which is the finer fish. But comparisons are odious, and as 6,000 odd miles divide them, there is no need for rivalry to exist at all.

But you will say all these rhapsodies are out of place, and that all you want is to know where to look for the fish and how to catch them. In practically every river in India of fair size, you will find Mahseer, always provided that the river has its origin and that its course runs for a certain number of miles at an elevation of at least 1,000 ft. above

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\* Beavan's *Barbus Mosal*.

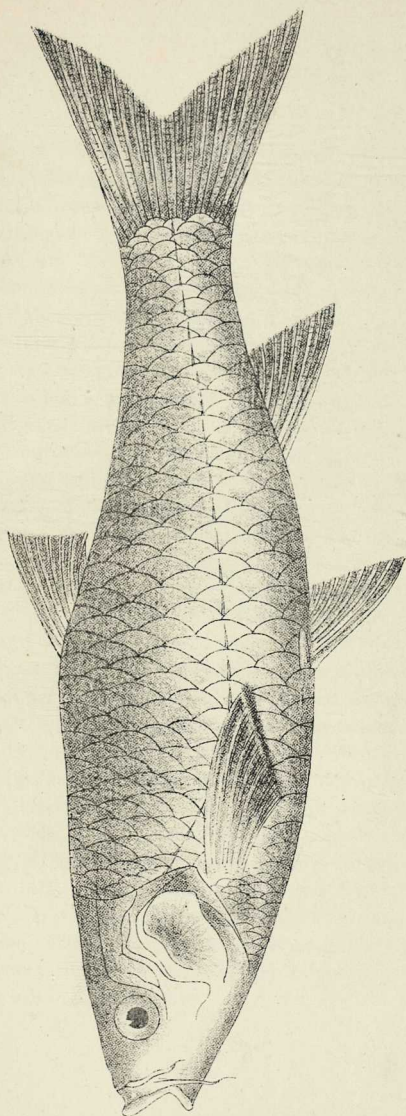
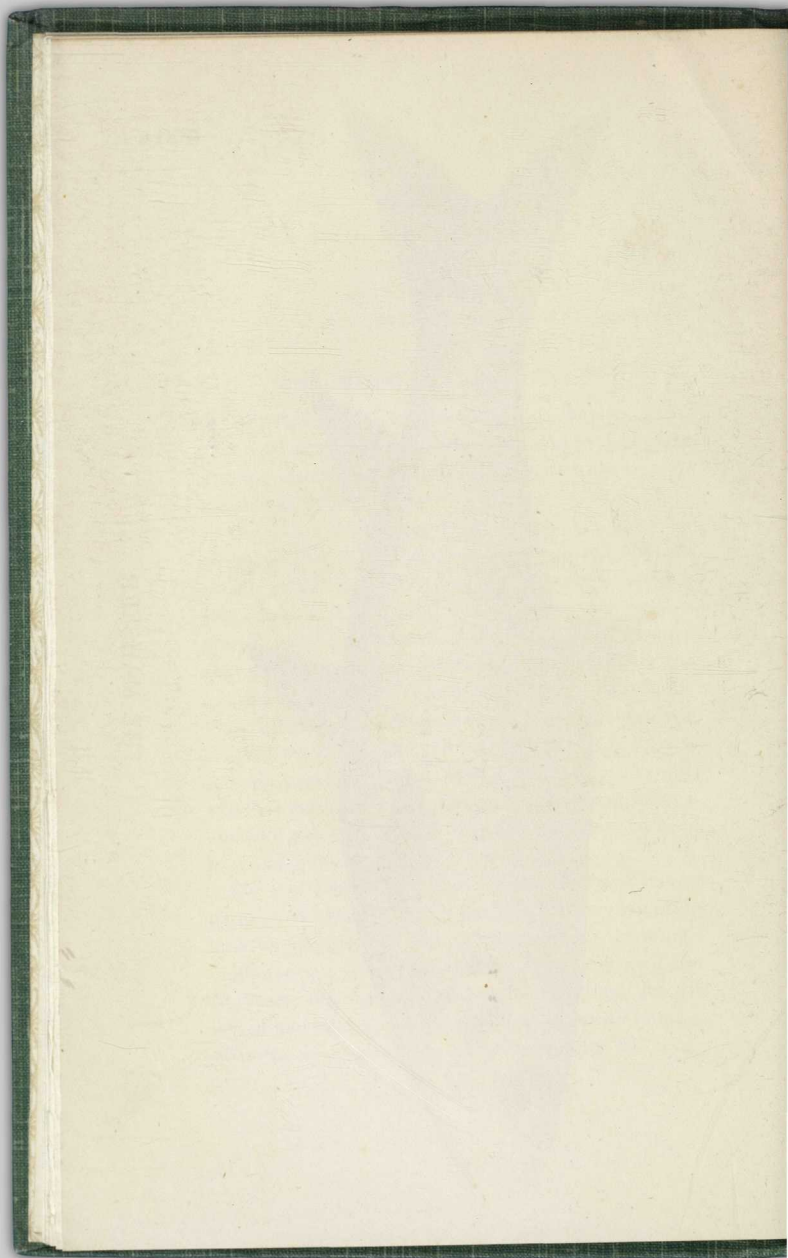


Plate I.

THE MAHSEER.





sea-level. In those rivers that run their brief course through flat country and take their rise in hills of low elevation you will not as a rule find Mahseer ; since two things that these fish insist on are rocks and rapid water, and if a river cannot fulfil one or both of these conditions in some parts of its course at least, the Mahseer will have none of it.

Naturalists tell us that there are varieties of Mahseer, but that does not affect the ordinary fisherman, to him a Mahseer is a Mahseer, and the points of difference are not so great, that it is necessary to enter into them in a small volume of this description. But that different rivers do produce different varieties of Mahseer, varying in colour and shape, is a fact that soon becomes impressed upon one. And even in one river I have caught three quite different types of Mahseer. Whether they are all "Barbus Tor" or perhaps kindred fish of the Barbus tribe, is beyond my knowledge. They all had the large characteristic mouth of Barbus Tor, and all had  $2\frac{1}{2}$  scales between the base of the ventral fin and the lateral line. In the Kalinadi for instance I have caught three quite distinct varieties. No. 1 rather deep, golden scales, pinkish fins and tail. No. 2 longer and narrower, pale blue fins and tail, scales silvery blue. No. 3 jet black, fins, tail, mouth, etc., all black, with deep golden scales, an exceedingly handsome fish. These latter appear rare and I have only seen two specimens. The Mahseer is a carp, though he bears about as much resemblance to our degenerate English carp, as the latter does to the gold fish in an aquarium.

Mahseer may be fished for both in the rapids and in the pools, the latter though they yield generally the heavier fish, are more difficult to fish, both because a boat is necessary to do justice to them, and because owing to the clearness of Indian waters, the fish are more likely to see you and become shy.

One thing you must remember wherein English and Indian fishing differs. At home a mild spate and coloured water rouses joy in your heart. In India the clearer the water the better your fishing. It is generally useless to try spinning for Mahseer when the water is at all coloured. I say "generally" with intention, as with many, I know that it is considered an axiom—That, given coloured water spinning is quite hopeless.

But this is not always the case, some rivers never really clear, at least not to that crystal clearness one is led to expect. I know that one of the best bags I ever got, was when spinning in a river so thick that literally one could not see bottom in four inches of water. But of this subject more anon. Next as to lure. The Mahseer is not unfortunately a good fly-taker, though take fly he will, and very well at times; but as a rule it is only the smaller ones that you will catch in this way.

But the lure *par excellence* for the novice, and one easy to use and to procure, and a bait always clean, is the spoon. A good size (if you are fishing for ordinary sized fish, say 1-10 lbs.) is a 1½ or 2-inch spoon, gilt one side and silver the other, with a flying mount of two hooks. There is no rule as to this, some prefer bigger spoons, some smaller, some

## II

like one treble, some a flight of two ; nothing but experience will teach you, and the author only quotes what he has found most successful in the majority of cases.

A small dead fish about four inches long is also an excellent bait though it is less easy to throw than a spoon, and then there is the trouble of preparing it, and the fact that it comes to pieces very quickly. Phantoms and Spinning Minnows do good execution occasionally, though if the beginner will confine himself to a spoon-bait at first, he will find it probably more satisfactory.

Now when I say above that the spoon is the bait par excellence, etc., etc., this must be taken in a broad-minded spirit ; and I think that one may safely say, that in 7 rivers out of 10, the fish will take a spoon practically as readily as any other bait. But the novice must remember that there *are* rivers where the spoon is at a discount for some reason or other. Instances are the Nerbudda near Jubbulpore where the fish seem to prefer gram to any other bait ; and parts of the Kalinadi river in Canara, where the Mahseer will not *look at* a spoon, will not *touch* a spinner, and will only *take* natural bait when mounted neatly with unobtrusive hooks. Still I need not enlarge on this subject ; it is unlikely that the beginner will ever find himself tackling rivers all on his own, without some more experienced friend to give him the necessary hints as regards those waters.

Then as to rods, opinions differ, some like 14 feet, others 16 feet, and some even an 18-foot rod,



though I must say the latter is making a business of a pleasure. If a beginner will content himself with a good greenheart 14-foot rod, he will, I think, find it suits him all right. In India a light rod is a great item, as regards pleasure in your fishing, as, when you fish sometimes for hours in a broiling sun, you find every oz. of weight in your rod a consideration. And a 14-foot rod will cover enough water in nine cases out of ten, and will allow of your using a lighter reel and line.

Then a word as to your trace; if you are using a 14-foot rod with a light fly top, I have always found a two yards trace of No. 2/o Hercules wire, fitted with two swivels, about the best thing to use. These traces are immensely strong, not easily cut by rock and are very little more visible than gut when the water is at all broken. Or you can use stout salmon gut, if the water is not rocky and the fish do not run very large. It is as well to have the spoon on a snood of the same material as your trace, though this is not imperative.

Then a good stout landing net and a gaff, and you are ready to proceed to river. There is no real need for a gaff or net, unless you are fishing from a boat, as the native is exceeding dexterous at bringing out your fish, if you have played him, exhausted, into shallow water. Next having fitted up your rod and mounted your spoon, choose a likely looking spot to commence. First let me caution you in one thing, a fish has eyes! This is a point very often overlooked by a novice, whose general procedure is to stroll up to the bank, and having

selected a prominent position on some rock perhaps, proceeds to survey the water. Then taking his rod, he starts dropping his spoon in likely spots.

Well he does catch a fish occasionally, as there are fools among fish, luckily; but still I would recommend a different plan to you, my reader. Look upon the fishes in the water you mean to fish as a herd of black buck, and, as such, to be stalked with care. Say you have selected a nice looking rapid to commence with, note the lie of the water from some little way off, and then approach carefully, just near enough to drop your spoon gently over the edge.

And again do not always be in such a hurry to get your spoon out just a little further. Keep well back and give the water close to your own bank a good trial first. Probably if you were fishing from the other bank, you would be all eagerness to get your spoon out and across into the very water that you are now wanting to ignore. Distance lends enchantment, as the poet Campbell has it in "The Pleasures of Hope" which would make an excellent title by the way for a poem on fishing.

Remember again the fishes have eyes, and they are in their own natural element, and it cannot make them think your bait more seductive when they see a wildly waving 14-foot rod and two arms up against the blue sky overhead. But in a good rapid when the water is well broken up, the odds are not so much against you after all, as it stands to reason a fish cannot see so clearly then, as through still water.

So after trying the water under your own bank move up carefully and slowly and commence trying the centre and opposite backwaters. Another thing to remember is that "movement is life" and it is movement that frightens animals.

I remember once sitting so still in a beat that a small jungle sheep came out, and stepped gingerly over one of my legs, which was lying rather outside the shadow of the bush under which I was sitting.

And you can try for yourself how movement affects fishes. Creep up very slowly to the edge of a bank overlooking a small pool, and you will see the small fishes and fry moving about quite unsuspectingly, but move your hand suddenly and sharply and see the result. Like lightning the little fish will scatter and vanish. So remember the quieter you are and less motion that you make in casting, the less likely will be the big fish in the depths below to see you and take fright.

One thing that you will have learnt at home with trout fishing, and which you will do well to bear in mind, and that is the fact that fish almost invariably lie with their heads up-stream (waiting for food to be brought down to them by the current). At home one is taught that the best way with a fly is to throw up-stream and let the water bring it back towards one, keeping one's line taut the while, but while this is an excellent thing for trout in England, I would advise the beginner in Indian waters to try a different plan when using spoon or minnow. In India the rapids are deeper and generally run with far greater velocity than any water one would fish in at home.



And remember when you are using a spoon (which by-the-way is meant to represent a small fish), phantom or dead-bait, you are trying to present to the fish his own natural food, tendered in such a way that he may take it without suspicion. If you threw your bait in up-stream, think what the result would be, it would come rolling and rushing back to you, probably mixed up with some of the trace, just as unlike the action of a little fish as it possibly could be.

Well, the way that seems to meet with the most universal success is to start at the foot and fish a rapid up all its length.

This mind you is only speaking very broadly. Experience will soon teach you that it is impossible for any man to lay down hard and fast rules how to fish in Indian rivers. Some rapids are so broad that a boat is necessary, others have such steep banks that in only one or two places can one get down to the water's edge. And yet again others are so jungle clad, that casting from the banks is impossible. *Experientia docet*, and it goes without saying, that the man who quickest adapts himself to his river, will catch the most fish.

We will assume that you have approached carefully, and are near enough to command the water comfortably. Then having got out the right amount of line, drop your spoon just the other side of the main-stream and a little up-stream, and keeping a taut line, let your bait swing round with the current, and pull it gently up through the eddies just out of the main current.

Another way of fishing a rapid which is very often successful, and which the novice will perhaps prefer, as it is certainly easier than the more scientific way, is to stand at the head of a rapid, and having dropped your spoon into the current, to pay out line allowing the spoon to drift downstream.

And remember one thing, when letting your spoon or spinner run out down a rapid—always “feel” it, three-quarters of the times that you get hung up on snags, rocks, etc., under water, the fault you will find was, that you ceased to feel your spoon for a minute, giving it a chance to sink, when the hooks promptly get caught in the nearest solid object handy. There are some rivers, notably the streams of the Western Ghats where it seems fatal to allow your line slack for a single instant owing to the innumerable branches, logs, etc., the rivers collect from their forest clad banks. So long as you keep your spoon spinning steadily you will seldom find that you get caught up, and if you do it will not as a rule be so badly, that a little manipulation of the line will fail to clear you.

When you have let out as much line as you can fairly command, start to wind in, bringing the spoon along through the eddies at the edge of the rapid. And do not avoid the white water in the rapids; you need not fear that any current is too swift for the Mahseer; and fish the rapid all its length right down and into the pool.

And do take heed to one point, it is one that you are sure to learn by painful experience, and that is

—in Mahseer fishing almost more than any other—  
 “be ready,” see that your line is always running clear  
 on the reel, and that you have no kinks that might  
 foul a ring.

A Mahseer does not take your bait with a gentle  
 tug or two like a trout; generally he takes it with  
 a rush, and before you know you’ve hooked him  
 your rod is bent and reel screaming merrily. Then  
 woe betide you, if your line has taken a hitch round  
 the handle of your reel, or fouls in any other way.

If the fish is of any size and wants line, you must  
 give him all he wants, if you don’t, then good-bye  
 to rod, line, or trace.

If you see a hitch is imminent or unavoidable,  
 then don’t hesitate an instant, but lower your rod,  
 and in nine cases out of ten the break will occur in  
 the snood\* (if you are fishing with gut traces) which  
 is usually more worn than trace or line, and you  
 thereby minimise your loss of tackle. If however  
 you are using wire traces, goodness knows where  
 the break will occur, but more often than not it  
 seems to occur in the line, near where it joins the  
 trace.

It is in this first glorious rush that the cream of  
 the sport with Mahseer fishing lies. As yard after  
 yard of line reels out, your heart rises, and you feel  
 the fish going up and up in weight, in your estimation.  
 Though I said before give him all the line he  
 wants, don’t take this to mean, give it to him  
 ungrudgingly. If your tackle is good and you feel

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\* The snood is the length of gut to which the fly or  
 spoon is attached.



fairly sure of it, bear on him every ounce you dare, and as soon as ever his first rush is over, reel in as soon as possible, and do not give him any time to think or rest. Be careful winding up to keep all clear as before, as directly the fish sees you, he will be off again on another rush, keep him at it all you can, give him no time to think out matters, or you will be having him fouling your line round rocks, or up to some other tricks.

And a word as to that much debated point, "to strike or not to strike." There is much said and argued on both sides. And if you can really successfully solve this point, you will as the babu said "Have cracked the Gordian Nut." Personally I do not believe in striking with a Mahseer. He has a leathery mouth that affords a good hookhold, and he is a heavy and game fish. If his own weight and struggles have not hooked him, then I think you run a great risk by slackening your line ever so little, and slacken you must if you want to strike. With a pliable top, acting as a cushion to any jerks and jars, it is possible to even land a fish without the hook having penetrated to the barb. Of course this seldom happens, but if you had slackened for an instant, and the fish was wide awake, in that second he would have taken his opportunity to get rid of your hook. While if you had maintained a steady pressure, the chances are that the hook might have worked its way in, owing to the weight of the fish.

And another argument against striking is—that the Mahseer does not give you much time to think about it; the very jerk with which he takes the

bait should be enough to drive the hooks well home, and a man must be quick of hand to lower his rod and strike, when a big fish is tearing out line at about a mile a minute. In all the foregoing remarks on fishing the rapids for Mahseer, I have assumed that the water is commanded from the banks, and that no boat is necessary as may be the case in some big rivers. Certainly if you can dispense with a boat it is far pleasanter work fishing, you are less cramped in your movements, and also the sun off the water when you are in mid-stream is very trying on an Indian hot weather day. But on some rivers a boat is a necessity, either from their breadth or owing to the dense jungle lining their banks. In such cases adopt as far as possible the same tactics as you followed from the bank, keep your boat just out from the main current and make long casts across and down stream in the rapid, and also up stream into the eddies that swirl off from the current. Playing a fish from a boat is always uncomfortable work, but of that more anon.

And now having finished with the rapid, let us try the pool below; for this a boat will be necessary. Let us assume you have a folding boat of your own, or perhaps a native coracle with its owner to work it. As the boat gliding over the water naturally scares the fish temporarily it is necessary to have out a good long line. Put on a slightly bigger spoon, say  $2\frac{1}{2}$  to 3 inches, and about two feet from the spoon fix on about 3 ozs. of lead—the weight depending on the depth you wish to fish at. Remember a point that perhaps I should have

mentioned before—the Mahseer is a bottom feeder, so fish pretty deep, not too deep, as a bait dragging along the bottom is not so easily seen by many fish, as is one, four or five feet up. Then start the boat slowly down the pool, paying out line, till you have some forty or fifty yards out. Keep going just fast enough to make the spoon spin naturally; and when you have worked down one side, come back up the centre, and then down the other side.

When you have struck a fish, remember he will probably make for the deepest part of the pool, bear on him all you can, and mind he does not make a dash under the boat.

If you can be landed easily, it is a good plan to get ashore to play your fish from there, as then you have more command over your line and will find the fish easier to bring to bag.

Above all things, when playing a fish from a boat, do not bring him alongside till you have got him absolutely done up, as it is no easy matter with gaff or net to get a heavy fish into a small and shaky boat.

And there is one other place that I try, always with the hopes that I'll move a fish at any rate. Just above many runs will be a spot where the water flows deep and strong, and where it gathers itself in for the final plunge over and down the rapid. As often as not the rocks will narrow in towards the head of the run and only the oily swirl of the water will betoken its depth and force. Then take your stand some 10 to 15 yards away and above where the water breaks, and casting your bait out as far as possible, let it swing round with the cur-



rent keeping it 2 to 5 yards from the mouth of the rapid itself. Here the water, though deep and strong, is clear, and generally at the first cast your heart will be gladdened by one or more darting black forms. And if in your first four casts you fail to hook a fish, give the place a rest and try it again on your way home, and sooner or later your reward will come. But be extra careful in fishing these spots that your line is all clear, for if the fish is anything over 5 lbs., he almost invariably runs down the rapid; and then the scream of your reel and the yards and yards of line flying out, delude the envious bystander into the belief that you have a 50-lb. fish on at the very least.

Now a word as to fly fishing for Mahseer. I expect with most of my readers that fly fishing was one of their first loves, and it is hard to give up first loves in a hurry, isn't it? Well, Mahseer do take fly well at times—though it is generally only the smaller ones that one can expect to catch with fly. But you must find them in the humour for it, like the trout at home; but then, unlike trout, unfortunately the humour does not take the Mahseer so often. One advantage the fly fisher for Mahseer has, especially if he is fishing on one of the big southern rivers, and that is, he has the chance of catching other carps as well, particularly our friend of the next chapter, and so making a mixed bag.

And next as to colour and size of fly. Though I have known men out here use all sorts and sizes of salmon fly, the general consensus of opinion is, I think, that a fly with a lot of black or peacock

harl in it is the best. Why, I do not know, except that the Mahseer is not particularly partial to a fly diet, I fancy, and he takes your dark fly under the impression that it is a juicy tadpole, or some other such delectable morsel.

Then as to size. Any size between 2 to 6 Limerick scale (see chapter on Tackle for caution *re* sizes) will do, always remembering that with the smaller sizes you have a better chance of taking some of the smaller-mouthed carps, whose acquaintance you seldom make while fishing with spoon or phantom.

When fishing for Mahseer, it is best to use only one fly, the tail fly, though if fishing for Carnatic carp it is usual to mount two, the tail fly and then a drop fly about three feet from it. And remember do not pull your fly too fast, it is not wanted to spin like a spoon bait, and lots of fish won't bother themselves to hustle after a fly which a neighbour may devour before they can reach it.

It is outside the scope of this humble volume to enter into details of various local devices for catching fish; such as fishing with gram for Mahseer on the Nerbudda, etc. Any one ordered to such a Station as Jubbulpore would soon find some mentor kind enough to initiate him into all the mysteries attendant on such fishing.

But one thing I will add before parting with the hero of this chapter, and that is a few words on live-baiting for Mahseer.

I don't know how many fishermen there may be, but assuredly there must be several, who have felt

the utter misery and blankness of soul that comes, after anticipating, perhaps for weeks, a projected ten days' trip after Mahseer, when they arrive at the river and find the water like pea-soup. This should not occur if one has chosen one's time rightly, but it may occur sometimes through untoward circumstances, such as sudden storms in the hills, or early falls and sudden meltings of the snows up in the higher ranges; and then ten days' leave gives one all too brief a period of fishing for one to sit in patience and wait for the river to clear. So the only thing to do is to make the best of it. It is very, very sad, but you may get some good fun, and catch big fish too, live-baiting. Take any small fishes up to  $\frac{1}{2}$  lb. in weight. Generally there will be some local fisherman where you are fishing, who will procure you some of these for a consideration. When caught put them in a common earthen chatty, half full of water, with a few holes bored just above the water line. Then cover the top with a big leaf or stone, or better still a piece of mosquito curtain over the top will save the necessity for the holes. This latter precaution is very necessary, as some species of fish would spend their whole time jumping out.

We will assume that you have your tackle ready (see Chapter XII for making up a live-bait flight). If using Parsons' live-bait tackle, take your small fish, treating him gently, and lay your single tail hook along his side parallel to his length, point of hook just above the anal fin, and eye of hook towards his tail. Then gently pass the point under the skin,



bringing the shank of the hook in a semi-circle up perpendicular to the back, and then down till the eye lies towards the fish's head; then pull the point through. It will now be lying beneath the dorsal fin; pointing towards the head. (All this sounds complicated, but if practised once or twice on a dead fish, its simpleness will become apparent.) Then adjust your top hook so that the fish will not be curved at all, and pass it through the upper lip. Or if using the Jardine Patent live-bait tackle, bait as follows. Pass the spiral wire in at the mouth of the bait and out at the gills, then twist the gimp into the spiral to hold it in place. The small hook of the treble is passed through the back fin (or a piece of skin) and bait is ready for use. The treble can be shifted up and down to suit size of bait. Now about two feet away from the fish fasten a 2-oz. weight—this is to anchor the fish to the bottom—and then drop your weight and fish in a rapid, in one of the eddies just off the main current. It is a very good plan to fasten on your weight with a thread or thin piece of gut, and then should it catch in a rock, you do not risk losing your collar and flight; the bait itself will usually steer clear of rocks. Fasten your rod on the bank, with the reel running free, and proceed to set another rod and line.

Once you have got your fish on, play him just as you would under ordinary circumstances.

This way of fishing is at the best slow, however one would only adopt it when the water is so coloured as to preclude the use of the ordinary lures. But though almost every man you ask will

tell you that fishing in coloured water is quite hopeless, it is sometimes just worth the trying. I remember one day in Central India, having ridden fifteen miles in a broiling sun to see a pool in a river, that a village shikarri assured me held "plenty big fish." On arrival my heart sank, as all I saw was a large pool, perhaps 400 yards long by 40 broad, in a wide sandy channel, and the water in it was so thick, that I could not see the bottom in two feet of water. I almost felt, in my disgust, like returning there and then, but my guide begged me just to try for half-an-hour. Well I put on a very bright spoon, about  $1\frac{1}{2}$  inches, and, wading in over my knees, I started. My third cast I was into and duly landed a 1-lb. Mahseer, to my own astonishment and the local shikarri's intense relief. Well, I continued with far greater keenness, and in under two hours had landed, all with the spoon, 13 Mahseer, 1 Murrel and 1 Rohu, total weight 28 lbs., also one small Wallago Attu.

And another time two of us fishing in a tributary of the Kistna, caught 8 Mahseer weighing 129 lbs. in a couple of hours, spinning in water so thick, from the red soil through which the river ran, that literally we could not see any bottom in 3 inches of water. So it is worth trying sometimes, though very seldom I fear. And should the water be a trifle coloured, and should you spin for one hour, in one small pool, catching nothing, do not for that reason go away convinced that there is not a fish in that place. That is how so often when one goes to a new station, and asks about the fishing at such

and such a place, one is told "O there is no fishing there, I have tried there twice, and so and so went the other day, and we never even saw a fish." And yet you might go to that place and persevering, have excellent sport occasionally. However it is always as well to find out from native fishermen first, that there *are* fish in that river, since some rivers either from poaching or natural causes, seem absolutely destitute of fish life. But the reason that you were told that there were no fish there, was that probably no man had been keen enough to give the place a fair trial, the days your informants went the water may have been a trifle coloured, or the fish may have been off their feed, or scared by something, or one or other of a score of reasons, so unfathomable are the ways of fish. A novice and lots of seasoned fishermen too, would hardly believe how thick with fish a small pool may be, so crowded that one would deem it impossible to spin in it for any length of time without catching something—even if only foul hooked. And yet one does fish in such pools and catch nothing. There is one pool I know, where I had an excellent object lesson in such matters. It is a small bay, very deep, and some 20 yards across only, that lies still and quiet off a rushing swirling rapid. A sandy beach runs down to the pool opposite the river, the other two sides of the pool are two huge rocks, honeycombed with holes scoured out by the force of a great river sweeping over them during the monsoon rains. Around lies virgin forest. I shall never forget my first sight of it; when I came upon it the hot wea-



ther was more than half over, and the water was the colour of gin. I climbed along one of the huge rocks, screening myself from the pool as much as possible, till I looked straight into the clear depths below. *What* a sight met my eyes. At least one hundred fish were quietly moving about in the still water, fish varying in size from monsters of 20 lbs. and more down to little 2-oz. carp. The fish were mostly Carnatic carp though there were a certain number of Mahseer among them. There are others too who know that pool, and who will acquit me of exaggeration in the matter, I said 100 fish though 200 would be nearer the mark. Here, thought I, I have only to drop in my spoon to reap a rich harvest; so crawling back and taking my rod from my man I was soon comfortably esconced behind a pinnacle of rock and ready to begin. The fish were quietly cruising about, rising to the top then swirling down again, all living in the utmost harmony apparently except that occasionally a diminutive carp passing too near a bigger brother would suddenly disappear. In went my spoon and slowly across the pool I spun it, but except the fish in its immediate vicinity who darted away, not a solitary carp would take the slightest interest in it. Occasionally however one or two fish would follow it with languid interest and then turn away bored.

For one solid hour I tried that spot, with spoon, phantom, natural bait and fly, and to all my lures the occupants of the pool paid the same scant attention. Had I not been able to see the fish simply jostling round my bait, I would have been ready to

make any wager that the pool was practically destitute of life. At the end of the hour my perseverance was at last rewarded however, I was spinning a small chilwa on a crocodile spinner and my bait was about half-way across the pool, when up from the depths sailed a fish, seized the chilwa and dived to the bottom. Five minutes later he lay on the sandy beach, a nice 8 lber. I tried that pool again at different times with varying success; once knowing how full of fish it was I spun religiously with a very bright spoon, when the water was badly coloured, not a sign of a fish rewarding my efforts however; though spinning my spoon in the rapids below, I got two or three fish, thick and coloured though the river was. Just a last word, I see that I have omitted to mention the time to fish. Well any time from 7 to 11 A.M., and 3 P.M. till dusk. Between 11 and 3 o'clock the fish do not seem to run so well, or else the heat makes one slack and one does not spin so nicely; and after all one is but human and a rest is a good thing.

Besides that, time is required for that delightful occupation of overhauling and doing up your tackle, preparatory to conquests new.

I'm sorry if I have been too prosy, dear reader, but even if you do not agree with all my sentiments herein expressed, you will agree with me in one thing, and that is that the Mahseer is a fascinating foe.

Barbus Tor—L.l. 25—27; D.  $3\frac{1}{9}$ ;  $2\frac{1}{2}$  Scales. For definition of above see end of Chapter I. and Index, under "Definition of terms."

#### CHAPTER IV.

##### BARBUS CARNATICUS (The Carnatic Carp).

**H**ERE is another friend, whose acquaintance I'm sure you will be delighted to make. The only fault to be found with him is that he confines himself—as far as I know—to the rivers of Southern India, though I have also heard of him being caught in the Western Dooars. His chief claim to our friendship is the fact that he takes the fly and that most gamely.

He is like a Mahseer, and in fact is frequently taken for one, but the smallness of his mouth compared with that of Barbus Tor and his greater depth will at once convince one of that error. Also remember one thing—a Mahseer has  $2\frac{1}{2}$  rows of scales and a Carnatic carp  $3\frac{1}{2}$  rows between the lateral line and the base of the ventral fin. Though he has none of the dash of the Mahseer, the Carnatic carp is no mean antagonist, especially when you are playing him on a gut cast.

Now before proceeding further I should like to remark here, that though the hero of his chapter is nominally the "Carnatic" carp, the following remarks may be taken to apply to one or two other species of fly-taking carp whom you may capture in the rivers of Southern India, chief among them being perhaps *B. Malabaricus*.



Although the Carnatic carp according to Day, runs up to 25 lbs. in weight, you will not as a rule catch them much over 7 or 8 lbs. Still there are places where they run big, and will take a bait; at one such perfect spot on the Cauvery, two of us caught in one week carp of 8,  $13\frac{1}{2}$ , 6, 9, 13, 7, 7 and  $9\frac{1}{2}$  lbs. besides innumerable smaller ones; and there too we spent many hours trying to tempt monsters of 20 lbs. and over, that we could see clearly in the pools below us. But such places are few and far between and usually one does not have the added bliss of seeing one's fish all the time spent in luring him to accept your bait.

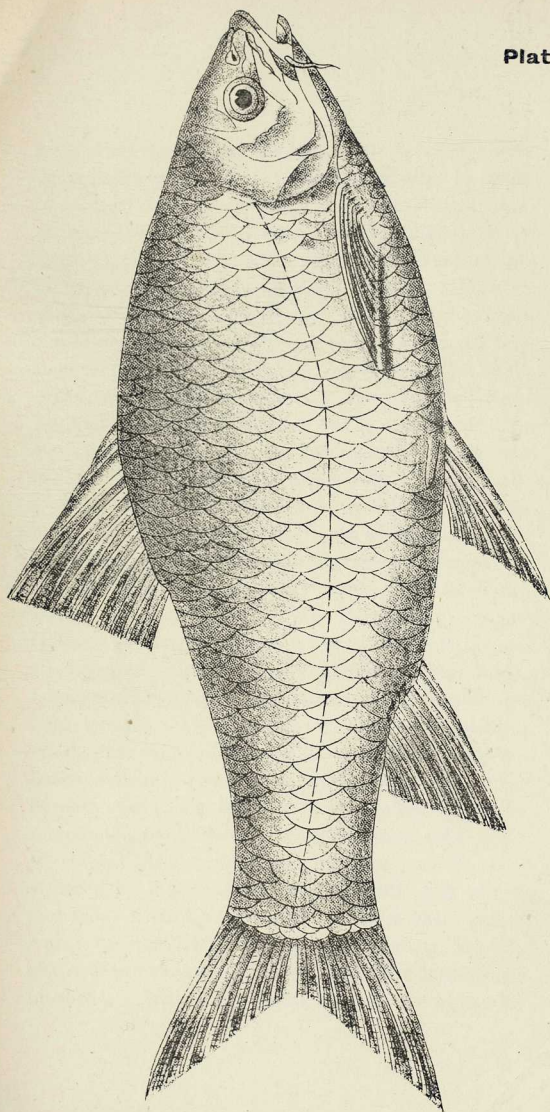
How to fish for them? This is a matter concerning which many pages might be written, as so much depends on the river, and on the actual place on that river where you are fishing.

As a rule you will only fish for carp—(1) when you wish to give the Mahseer a rest; (2) when there are no Mahseer in that water; and (3) when the carp so predominate that better sport is to be had by fishing mainly with an eye to them.

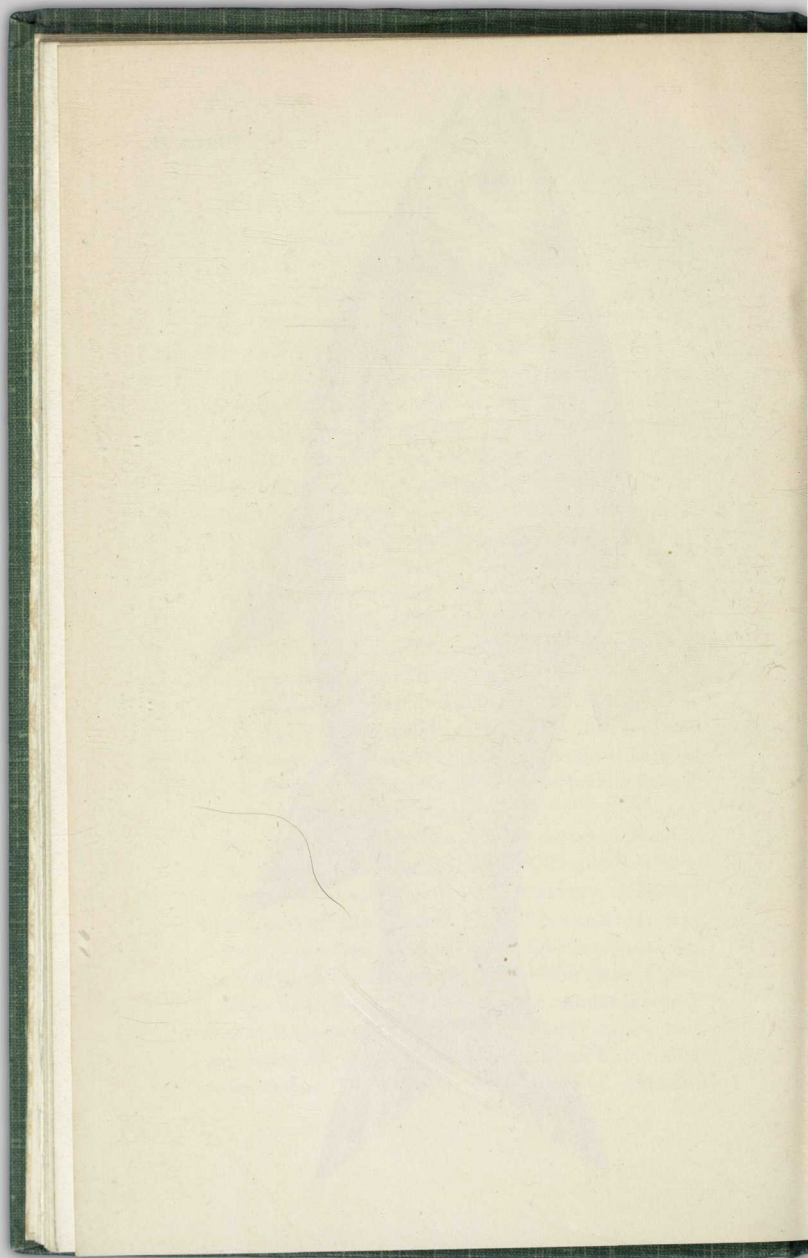
On the bigger rivers in which you may fish for carp, a boat is usually necessary. Remember, here I only speak of such rivers as the Cauvery, Cubbany, Bhavani and their affluents, (all Southern rivers) since to the best of my knowledge, Carnatic carp are not to be found in the rivers of Northern India.

Then as to lure. As I said at the commencement of this chapter, the Carnatic carp is a fly taker, and that being the case most anglers will ask for nothing more than to be allowed to offer him a selection

Plate II.



THE CARNATIC CARP.





from their fly books. But carp in common with other fish have many annoying traits in their character, and occasionally will refuse even your most seductive flies, with an utter indifference to their very existence, that would be exasperating had it not an element of the comic in it. Then it is necessary to try other lures, and among them are the following. In some rivers the carp are exceeding partial to grasshoppers, especially the little green chaps that abound among the grass that lines the bank along parts of those rivers. Get your man to catch a few of these, and then gently impale one on your fly, or give him a clean hook all to himself. Often the carp will take them ravenously, but also they will often scorn them utterly without rhyme or reason. *The* disadvantage of the grasshopper is that he is delicate, and very liable to flick off the hook. Another article of diet that carp are sometimes very partial to his leaves; but it is no use starting gaily away with a leaf fixed on your hook, unless you have some good reason to know that the carp *want* leaves. One fascinating spot I have in mind, where a small stream joins a larger one, the junction being a sandy bar, with about 1' of water flowing over it, the breadth 20 to 30 yards, and the surrounding banks being nothing but huge rocks some 20' high. And what a sight it was, to sit, half screened by a jutting pinnacle of rock, and watch that bar. Carp by the dozen, from 6 lbs downwards to wee little chappies, all waiting, the big chaps with heads just over the bar, the smaller ones by shoals a little way up the stream, watching for

whatever the small tributary might bring down to them. Then the fun trying for them, a badly cast fly and the small shoals would scatter in momentary terror, then a deft cast a little way up stream, and all the small fry would chase and scurry round your fly as it floated down over the bar within range of the big chaps whose behaviour varied in a way that was maddening, but entrancing. Time after time would two or three dash at the fly, then shy off, then swirl round again, sniff at it, shake their heads and dart back to the bar. Then for two or three journeys would they utterly ignore it, then again repeat their first tactics, till at last one would risk it, at least the fly had gone—no it was still swirling over the bar—yes this time it *had* gone and a minute after your reel was whirring with delightful music. But I stray from my theme which was leaves. It was at this spot that we were able to try leaves as bait with the most perfect opportunity of observing the behaviour of the carp. After watching for some time we noted that the fish were sucking down leaves as they floated over the bar, ignoring some species but remaining constant to one or two sorts. The next thing to be done was to send a man up stream, to gather us a few of such leaves as we described to him. After a time he returned with an assorted heap from which we selected the kinds that most resembled the ones our friends were feeding on. Then to the fray. We were only fairly successful for the following reasons. First came the difficulty of getting the leaf to stay on the hook, this was overcome by sowing the stem round

the shank of the hook. Then the next trouble was that the leaves, sunk by the weight of the hook, *would* curl up.

However when our leaves did float down honestly we beguiled a few fish into taking us. Lastly, I tried a good sized spoon, a 2" gilt and silver with flying mount. This was astonishingly successful, especially when it swirled into the pool and looked exactly like a large bright leaf, and for such I'm convinced the carp took it, as they sucked it down in precisely the same manner as they took the leaves. But this brings us to another lure, and that is natural baits and imitations thereof. There is no doubt that every carp, no matter how small, is predacious. It is only the exceeding small mouth of a little Carnatic carp, that prevents him from preying on his still more diminutive brethren. But over 2 lbs. I have found that they would freely take spoon or small chilwa on spinning tackle. And several times have I caught a 3-lb.—or thereabouts—Carnatic carp on a 2" spoon, so you need not be shy of using a fair sized bait especially if the water is at all colored.

Another pool there was, where I again had excellent opportunities of studying the habits of Carnatic carp. It was a large deep pool surrounded by high rocks, so that one was always 15 to 20' above the fish, which could be plainly seen in the clear water below; and through the pool ran a strong stream, with an occasional rock rising here and there. In this pool I successfully used natural bait, spoon and fly. Returning to the leaf theory of the spoon, I was using again a 2" gilt and silver spoon that when kept



spinning near the top looked for all the world like a floating leaf. And that several of the carp took it for a leaf, their behaviour quite convinced me. They would lazily follow the spoon down stream, and then either leave it, or else they would quietly sail up to it, and suck it down.

Then immediately they realised that they were hooked away they would go, and as the stream was strong, one was not sorry to feel that one had on a good wire trace. On the other hand, when spinning a small chilwa, and occasionally also with the spoon, the carp would take the bait with a sharp movement—nothing like the mighty rush of a mahseer—but still with a quick jerk, that clearly proved they imagined their prey to be a live fish, and therefore not to be taken in the same leisurely manner that they would adopt towards a leaf or a fly. And another point to which I could never fix any satisfactory reason was this.

Often one would drop in one's spoon or spinner, and bring it, looking most alluring, right across a pool full of carp, and not a fish would take the slightest notice of it. After doing this two or three times anger would seize one, and the next time in went the bait with a mighty splash, and instantly a fish would be on and away with it. At other times the slightest splash would frighten all the fish for yards round. And there seemed no reason for this, as different fish in the same pool would act in diverse ways, some scurrying away terrified from the splash while others would come rushing to see what it was. But verily the man who would ever think he knew

all—or even one half—there was to know about fish, would be a sublimely confident man. But all this is straying very far away from our boat, awaiting us on the big river. The above is all “Carp-fishing delightful” and such spots are few and far between, where you can fish comfortably from the bank and see your fish the while. Usually your river runs broad and deep, with the jungle stretching down to the very water’s edge, making casting from the bank a difficult, if not an impossible, feat. So recourse must be had to a boat, and if you have a folding boat of your own and a man to row it, so much the better, since boats of any sort are few and far between on the forest clad rivers where you will find your fish. At certain spots, on the Cauvery and Bhavani rivers, coracles can be procured; also at many places on the Tunga Bhadra can boats of sorts be got, but where boats are, there also are native fishermen, and unfortunately it generally follows that the rivers are well poached in those places.

The coracle is a quaint round basket work frame, covered with raw hide, and can be carried by one man; and it will carry two—comfortably I was going to say, but one cannot call a coracle comfortable by any stretch of imagination. However one can make them bearable by placing an empty wooden box inside to sit upon, anything in the nature of a chair is impossible, as the legs would penetrate the raw hide covering. Well, no matter what species of boat you use, the procedure is the same. Once fairly launched on the river, it remains for you to

keep your eyes open and to watch for signs of fish being on the feed. Still, try all the water as your boat gently drops down stream, try the eddies in the pools and try the runs themselves, do not be frightened to try the roughest water as more than once have I taken a carp right in the white water of a fall. But the place they especially affect, is the deep water and the eddies under the banks where the latter shelve down pretty steeply to the water, so have your boat paddled gently down the pool, keeping just far enough out from the shore so as to drop your tail fly close in under the bank. Do not pull your flies too quickly, bring them to you slowly or let them drift with the current keeping a taut line all the time.

Now as to your rod, use either a 14' or 12' fly rod. But the former is, I think the best, as it enables one to get out a longer line, and I'm sure the presence of a boat cannot tend to reassure any fish.

Take off your spinning trace and fit on a fairly stout trout cast, with a couple of small salmon flies. As with Mahseer, so with Carnatic Carp, dark flies seem the best, and in my opinion a fly on a No. 6 Limerick hook is about the best size. But forget all I told you about fly fishing for Mahseer; this is a very different matter. The Carnatic Carp takes a fly quite differently, he just sucks it down and then placidly continues his way. There is no tug as with trout, so that if you are fishing in a lazy or careless mood, such as we'll hope you never do, perhaps you may never know that the fish has taken your fly at all, because, once in his mouth, when he



finds that it is not quite so succulent as he thought, he cheerfully and unconcernedly ejects it. So watch, and when you see a fish rise to your fly, or notice a swirl where your fly has just gone down, strike and strike quickly.

And when you have struck a fish draw him out, and play him as far away from where you struck him as possible, and having landed him, go back, and try your fly in the same spot again, as these fish seem often to go in shoals.

Once into a fish you will not be in much doubt as to whether he is a Mahseer or Carnatic Carp. The latter has none of the dash of the former, but bores down into the deepest water he can find, and if a big fish, it takes a good steady pull to induce him to come up and face the net.

Some men advocate the use of a small piece of white kid fixed on the point of the hook when fly fishing for Carnatic Carp; I have sometimes tried it but it has never seemed to render my flies more alluring; however fishermen would never have recommended it, had they not found it answer on occasions. Another article of diet that Carnatic Carp, in common with Mahseer, are fond of, is a certain kind of water weed, and in some places the natives make good bags of the various sorts of carp, fishing on the bottom with this weed wound round their hooks. But truly fish are omnivorous. I remember toiling all one day at Seringapatam on the Cauvery, my total catch being one carp of 4 lbs. It was drawing on in the afternoon when I came across a native fisherman, a Mahomedan, and as much may be

learnt from these men, I entered into conversation with him and watched him fishing for a time. He was using a fine bamboo rod some 4' long with a long tungoose cast fastened to the thin end. In his belt was a reel with about 30 yards of twine on it, the end of the twine being tied on to the butt of the rod; so that whenever he got a fish on, too heavy to play with his light rod, he threw in the bamboo and played the fish by hand from the reel in his belt. He was fishing in a run that I had tried an hour previously with fly and spoon, and in which not a fish had stirred, and in half an hour he had caught two carp. His bait was pieces of orange! Having skinned his orange and divided it up, he broke each piece in half, and simply passed his hook through a bit, and then swung the bait into the rapid, letting it drift slowly down. And another trick he had. Every time that he tried new water, he gathered a handful or two of grass and threw it into the stream, and time and again did I see him rise one or two carp by this method. As he informed me, it woke the fish up.

*Barbus Carnaticus*, Ll. 30-32; D. 4  $\frac{4}{8}$ ; 3  $\frac{1}{2}$  Scales.



## CHAPTER V.

### THE LESSER FLY-TAKERS.

#### BARILS.

OF these smaller fry perhaps the most numerous are the "Barils" of which there are some fourteen different species in India. The only one of these that attains to any size is "Barilius Bola," (Beavan's Bola Goha) commonly called the Indian trout.

Unfortunately this very game little fish is confined only to certain parts of India, *i.e.*, Bengal and the United Provinces. I have never seen or heard of one being taken in Southern India. He will take both a fly and a small minnow and is a most sporting fish to play; frequently jumping clear out of water like his English namesake. He runs to about 2 lbs. in weight, and may be fished for just as trout are at home.

All the other Barils are small in size, seldom exceeding 6 inches in length, some of them, being very pretty little fishes.

You will generally find one or more sorts of them along with Chilwa, in rivers frequented by Mahseer.

Fish for them just as you would for trout at home, and remember they are just as shy and wary as trout. Your flies, however, must be very small. A No. 14 sneck bend hook for choice, as the fish are small-mouthed, and though they will go for your fly



readily, they are not easy to hook unless your flies are small.

Perhaps it is not very often that you will find yourself fishing for these lesser fly-takers, as they generally inhabit water in which Mahseer may be taken, and it is hard to leave off spinning for one minute when there is the hope of getting a run from a Mahseer. Still sometimes after a hard, and we'll hope successful, morning after the bigger fish, it is a nice and quiet form of relaxation to get one's little 10 ft. trout rod out and imagine oneself on some bonny burn in far Caledonia.

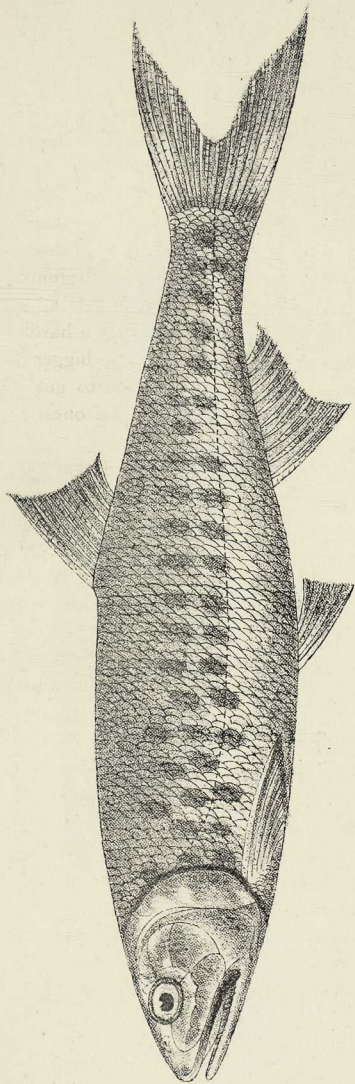
As regards colour in flies, here again, if you stick to dark colours you won't be far wrong; try black gnats, black palmers, blue duns, etc., though in the evening I have found white moths successful.

Fish cannily and fish up stream as you would in a small burn at home. Use light tackle, a fine drawn trout cast with three flies.

They do not run large, the biggest I ever caught was just under  $\frac{1}{2}$  lb. and he fought like a little demon. When fishing in a lake with these pretty little fish rising well one can have really excellent sport as though it looks easy enough to catch them yet you will find it is by no means so simple as it looks. The illustration shows one of the small barils, so numerous in the lake at Ootacamund.

There are several ways of putting on your drop flies, two of the simplest of which I will mention here. No. 1. If your fly is on looped gut, bend your gut cast into a simple loop, and pass this through the loop of fly gut, then pass the fly up through this

Plate III.



BARILIUS BOLA.

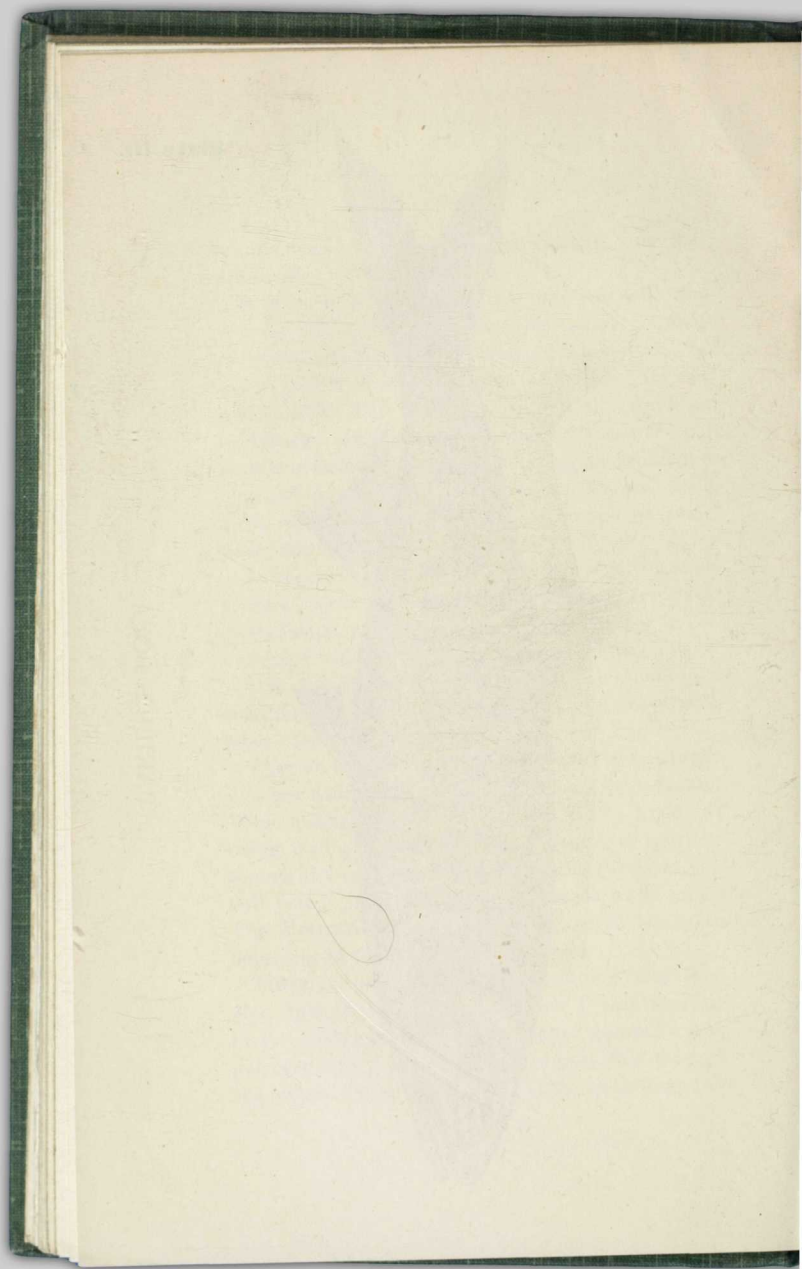
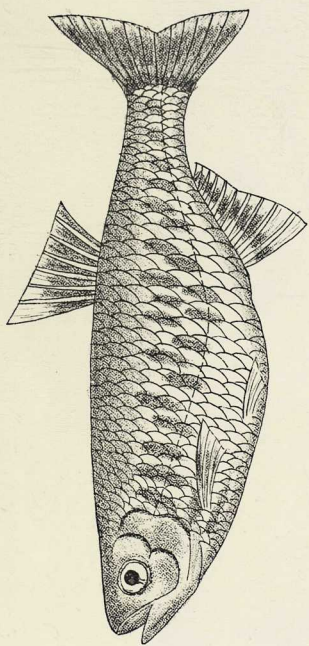




**Plate IV.**



**BARILIUS BAKERI.**  
(Beavan's B. Gatensis.)

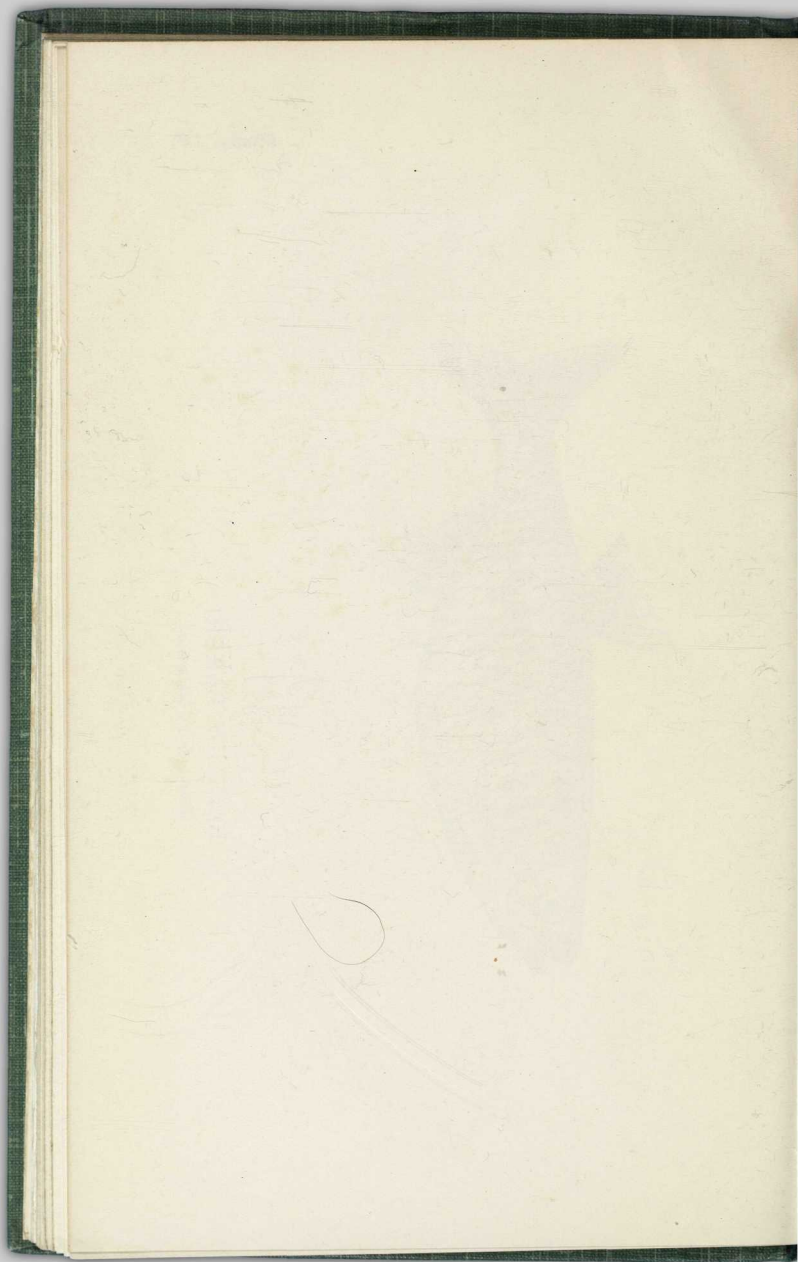
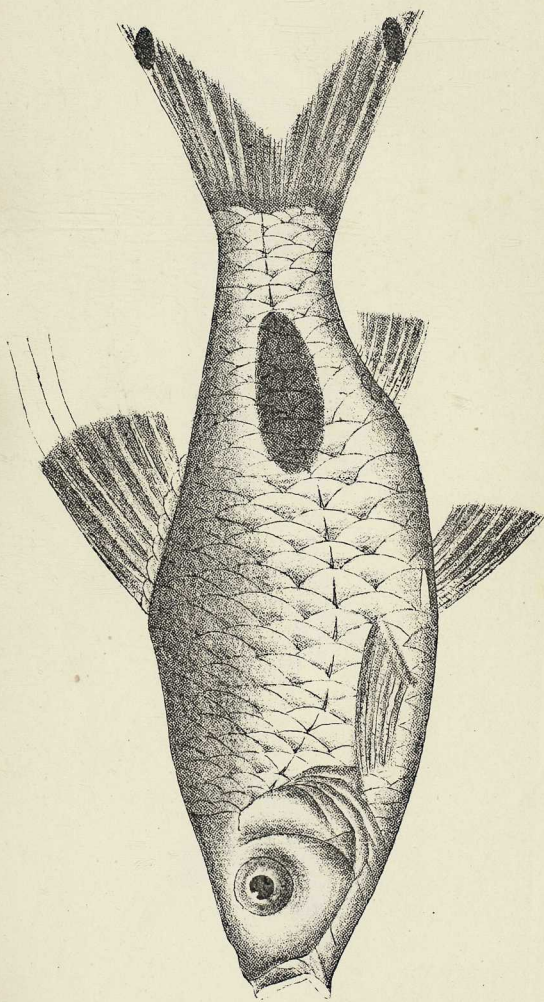
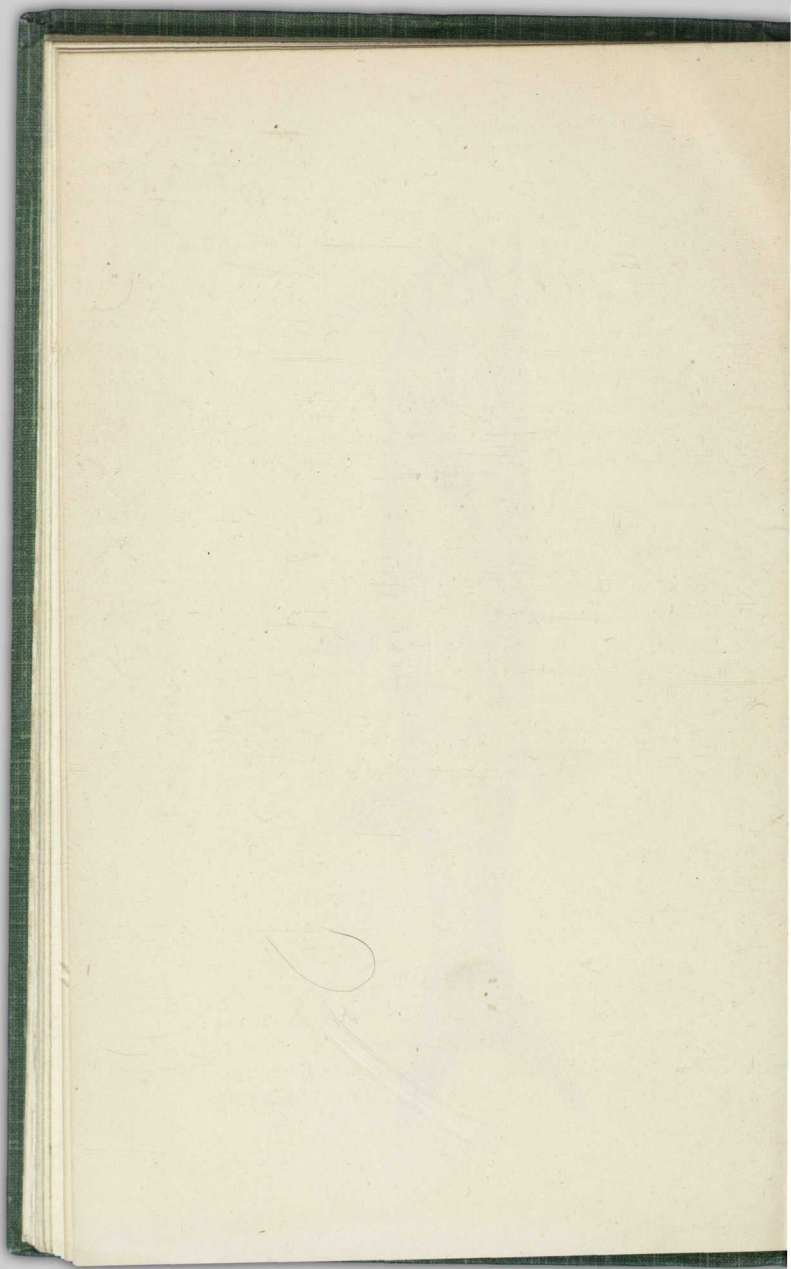


**Plate V.**



THE BLACK SPOT.





loop and pull taut. No. 2. Tie a knot in the end of your drop, and then make a simple knot with drop round your cast and pull tight. You must do the knot of No. 2 just above a knot on your cast, so that it will not slip down.

Do not have the gut of your drop flies too long, or they will wind round your cast. Also put your two drop flies between two and three feet apart from each other, and away from the tail fly.

#### THE BLACK SPOT

Is another fish that also is to be found in rivers, and is a small prettily coloured fish with a black spot over the anal fin. They do not appear to be nearly so numerous as the Chilwa or Barils, and according to Thomas are only to be found in certain rivers in Southern India. Personally I only know them in the Cauvery and Cubbany rivers (and have also seen I believe, but not caught them in a tributary of the Kala Nadi) and have had very little experience with them even in those rivers. They require quick striking and also seem shy so that the longer the line you can get out, the better will be your chance of success. You will not catch them over  $\frac{1}{4}$  lb., so fish very fine, with the same small flies as recommended for Barils.

#### THE CHILWA.

And then the Chilwa or Chela. This is perhaps the commonest fish in India. There are some ten species of them scattered all over India, but all much the same. They run usually about six inches in length, though I have heard of them being caught

nine inches, and a foot long. They are a small long-shaped fish, with a thin body, and the dorsal fin set very far back. They are covered with minute silver scales, which come off very easily when handled.

Their colouring when freshly caught in running water is most beautiful, the brilliant silver of their scales contrasting with the pale greenish sheen of their backs, gives a fleeting radiance that cannot be reproduced on paper.

You will find them both in ponds, and in the still waters in the rivers. They are most game little fly-takers, occasionally jumping right out of the water after your flies.

Quick striking and small flies are two of the *sine qua nons* for catching them.

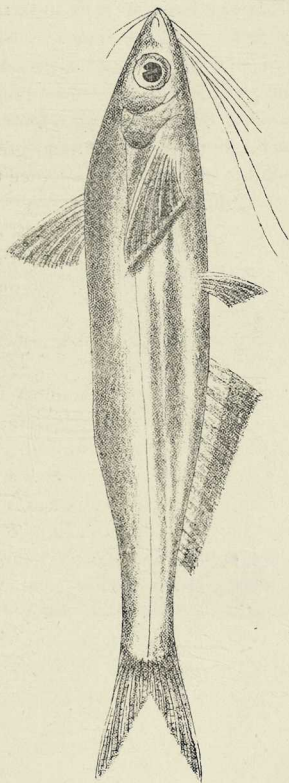
They are perhaps the bait most appreciated by Mahseer, but as they are delicate as live bait, and come to pieces rapidly as dead bait, you will usually find it convenient to use some fish of a tougher species. Unless, as at some places on the Cauvery, you can obtain an unlimited supply of Chilwa, when you will find them an excellent lure to use, since as soon as one gets a trifle ragged you can mount a fresh one. And if using a simple spinner like a crocodile, the mounting takes but little time; and really I did not find that with careful spinning, they came to pieces so very quickly.

#### THE BATCHWA.

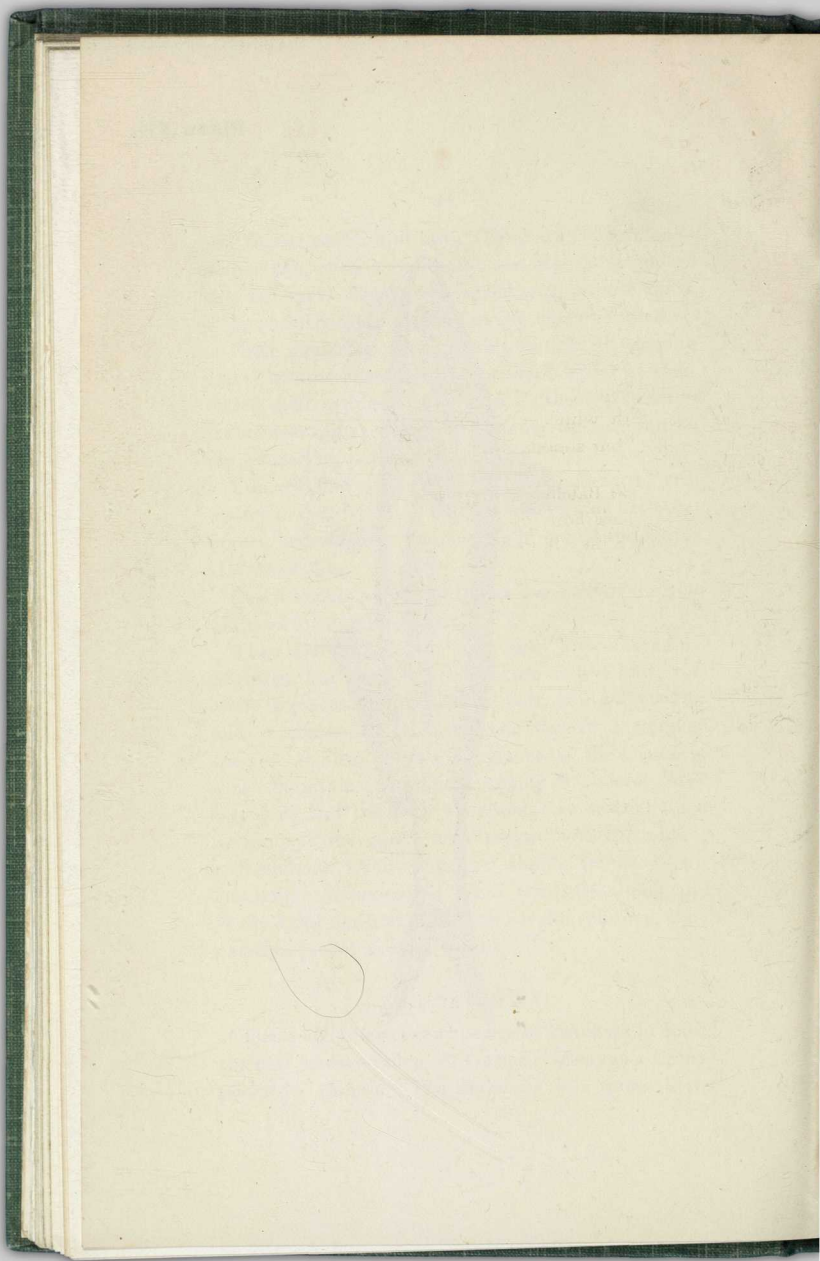
There are some seven species of Batchwa in India the best known being *P. Garua*. (Beavan's *Eutropichthys vacha*). The Batchwa is a game little



Plate VII.



THE BUTCHWA.



fish running up to 2 lbs. in weight, who will take either fly (lake trout size) or small spoon.

He is only to be found in the rivers of Northern India. One excellent thing about him is that he will take in coloured water, in fact the time to fish for them is between March and November, when Mahseer fishing is out of the question. They have small teeth which cut one's gut occasionally, so examine your snoods from time to time.

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*N.B.*—The Batchwa is noted here, as he is a fly-taker. His real place however should be in Chapter VIII. as his family is the "Siluridæ."

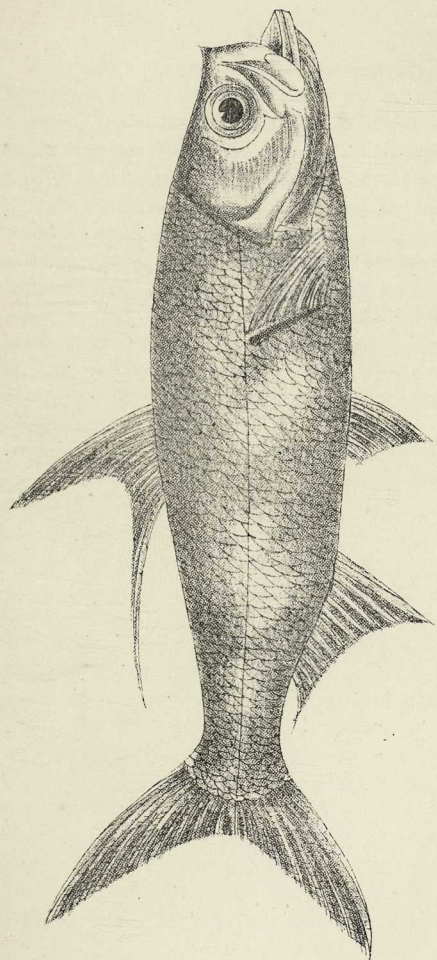




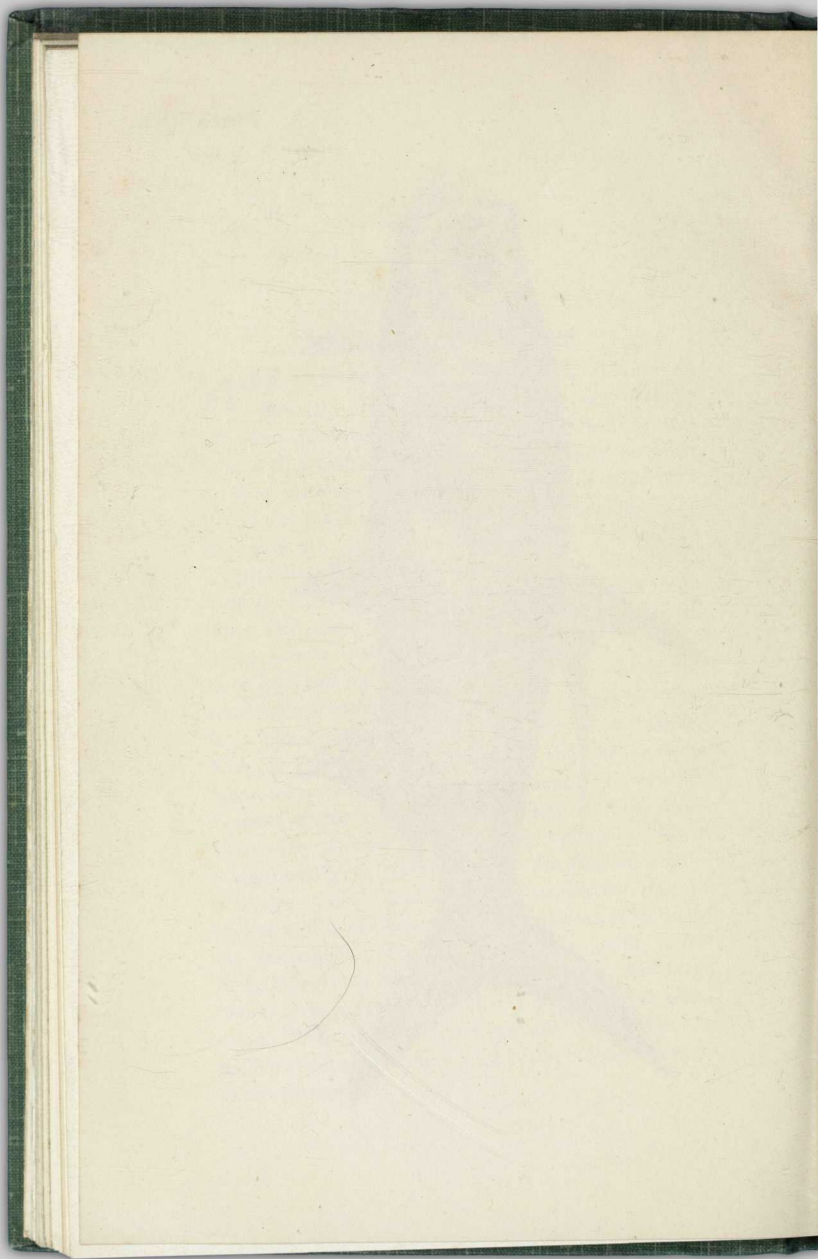
## CHAPTER VI.

### MEGALOPS CYPRINOIDES.

**H**ERE is a fish that I must give a chapter to himself. He seems very little known, perhaps his name has frightened people but none the less he is well worthy of mention. And surely he must be first cousin to the great Tarpon of America? For is not the Tarpon "*Megalops Thrissoides*," *i.e.*, Big-eyed fish with a swelling; while "*Megalops Cyprinoides*"—Big-eyed carp with a swelling; both from the Greek. I speak here with fear and trembling, that some scientific giant will crush me with scorn, for my interpretation of the above; but anyhow one has only to compare the pictures of the two fish to convince one that our *Megalops* must be a blood relation of sorts to the great "Silver King." I see that Dr. Day says that he is to be found all over India; he does not mention however—I speak under correction—to what size he runs. Personally I have caught them up to 3 lbs. in weight and have been broken by fish that must have well over 5 lbs. And one man assured me that he had caught a 12 lber., and I have no reason to doubt his statement. The most striking point about *Megalops* is as his name would imply, his large black eyes, a feature he shares with several other estuarial fish; and which are probably given them to enable them to see their prey in the coloured waters of the estuaries.



MEGALOPS.





Two tanks near to Madras, both of which hold Megalops, I have frequently fished in; in one tank, though I have caught them with a worm, I have never seen one rise on the surface to my knowledge; though in the other tank I have seen them rolling over in shoals in the early mornings, and have had excellent sport with them with a fly sometimes.

They take a big-sized trout fly, any colour seems to suit them, and require very quick striking, and when hooked, they give excellent play. They are really estuary fish, but seem to become acclimatized to fresh water very quickly. They are said to be destructive to fry, so are not a good fish to introduce into preserved waters.

One thing about fishing for them with a fly is, that one seldom seems to catch one over 1 lb. by this method. But *the* way to fish for Megalops is undoubtedly by live-baiting. Send out a man early, the day you mean to fish, and tell him to procure you a supply of small fish, between 2 and 4" long, and give him a chatty wherein to put them. The chatty should be about half full of water, and over the mouth tie a piece of mosquito netting, so that while the water is well aerated the little fish do not get an opportunity to jump out. As live-bait there is no doubt that small fish of the carp species (called Kendi in Madras) are the best, being tough and well liked by the Megalops. Failing these, Chilwa may be used, also small fish of the murrel tribe. Now to rig up your tackle. Opinions vary, the following is what I always used. A rod of 10' or thereabouts, fairly stiff but not too much so, or you

lose half the pleasure of playing your fish. Then a reel with about 30 yards of trout line and a 3-yard cast of good stout gut. Next prepare a snood of stout gut 2' long with a loop at one end and a No. 2 or 3 Limerick hook at the other. Three inches below the loop should be a small No. 6 swivel. Lastly comes the float; with this at first I had some difficulty, one does not want too big or conspicuous a float, while if your float is too small your bait keeps taking it under. Eventually I rigged up a float however, which I always found very satisfactory. Take an ordinary whisky bottle cork, bore a small hole in the top, and having cut a piece of quill 2" long press this in and with a drop of glue added, it will stick quite firm. Paint two red bands on this like on the detective float. Then blacken the cork with ink, and having sharpened the thin end a bit, bind on a loop of stout line. Your float then is simply an adaptation of the detective float (Plate XXIV, Fig. I) while it is stout enough not to be taken under by your small bait. Your float should be put on at the join of the cast and the snood, *i.e.*, 2' away from your bait. Then I always had a small cork—painted white—tied on where my running line joined my cast. This fulfilled two purposes, holding up the line and cast and also telling me when to strike—of which more anon. A little vaseline or red deer's fat rubbed on the last few feet of line is also useful in keeping the line afloat and thus avoiding distressing the bait unnecessarily. Then to start fishing. Take a small bait from the chatty, and hook him lightly through the skin of the back, if of the carp species,

but if he is a chilwa you must pass the hook through the orbits. This latter is a nasty method, but we fishermen are cruel brutes anyway; and luckily fish do not really feel pain as we do,—the arguments on this subject are too hackneyed to be reproduced here. Then having ascertained that your small bait is lively enough, by holding him in the water just under the bank; swing him as far out into the tank as possible, and having gathered in the slack, wait events with your eye fixed on the float. Megalops by the way often seem to be fond of lying close in under the bank if the water is at all deep, and several times have I been taken with a rush, when just lowering my bait gently into the water to see if he was alive and well. If your bait is all right, the float will keep on the move, generally travelling in under the bank after a time, in which case it must be swung out again. Sometimes you will be taken without the slightest warning, but generally the increased liveliness of your float will give notice that your little bait is perturbed in mind, probably because of the vicinity of some larger fish, therefore whenever you see your float bobbing with unusual vigour be ready. What usually happens is that after a short series of such bobs, the float disappears suddenly, and action on your part is necessary. But what action is *the* difficulty of Megalops fishing, every man has his own pet theory, some strike instantly, others let the fish run for a few yards, but whatever system one adopts it is astonishing what a number of fish one loses. The Megalops has got the most extraordinarily bony mouth, and the marvel



is how one ever gets a hook-hold at all; a point on which I'm sure you'll agree if you examine the mouth of the first one you catch. Well I'll give my theory with regard to striking, not that I flatter myself that it is better than anyone else's; but it is necessary to give some theory in order that the beginner may have some one to curse when he misses fish after fish. As soon as my float disappeared, I watched my white piece of cork, and immediately *that* started to travel, I knew that a big fish had taken hold and struck accordingly. These tactics I found necessary as often an extra lively bait would manage to drag the float under temporarily, and as a fairly hard strike is necessary, it meant that you lost your bait every time you struck for nothing. Once get your Megalops on, and you could not wish for a gamier fish, he plays just like an English trout sometimes springing a couple of feet out of water three times running. But the annoying part of fishing for Megalops is the glorious! uncertainty of the sport. After more than a year's steady experience of Megalops, fishing frequently for them, really I find that my knowledge of their habits is practically nil. Why is it that some afternoons one will get six or eight runs in an hour, while the next afternoon though sun, wind and every condition is identical, not a fish will stir? One week they will take fairly, another week well, a third week not at all. And then their behaviour with fly. Occasionally—but how seldom—have I had really excellent sport with fly, but for every single time I have got them to take fly, some fifteen practically blank days are in the

debit total. I have been told by one or two men however, that in some tanks where food supply is not abundant, excellent sport has been had with fly among the smaller fish. On three separate occasions only, have I seen a tank simply alive with *Megalops*; tanks too that I had frequently fished in, and would never had otherwise said were crammed with fish; and on each of these occasions one had only to drop in one's fly to be taken, and often broken also I regret to say, as the fish are exceedingly powerful. *Megalops* unfortunately is not a common fish, being only found in estuaries and in tanks near the coast line, and as far as I know only in certain parts of India. It is a pity that they are not more widespread, as a more excellent—tho' annoying—fish for tank-angling, it would be hard to find. Some people may say how are they to recognise a *Megalops* when they see him, or know that a tank holds them? The first question is easy, look at the plate and remember his big black eyes, and you cannot fail to recognise him. The second question is more difficult. However if you think that there may be *Megalops* in any tank, watch it between 5 and 6 p.m., and if they are present you will soon see big swirls here and there, and generally a gleaming silver side or a forked tail; and as they rise in a way peculiar to themselves, when once recognised, you are never likely to mistake the rise of a *Megalops* for that of any other fish.

*Megalops Cyprinoides*, L.L. 37—42; D. 17—20.

## CHAPTER VII.

### THE MURRAL.

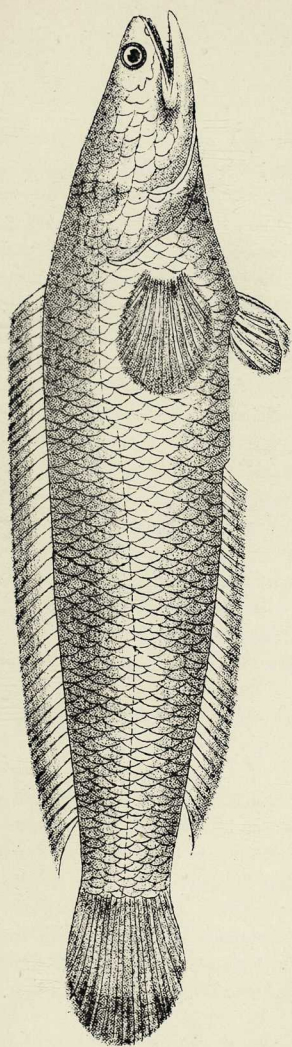
**H**ERE is a gentleman with many vices and but few virtues, but by reason of those few virtues we will admit him to our select circle. To enumerate them, he takes a fly and spoon bait, indifferently it is true, but then he is greedy as regards live-bait and frogs. Also he is a very common fish, abounding in tanks and weedy pools all over India.

He has one more virtue too, though it is one that does not concern us much, and that is he is one of the few fish which exhibit parental affection towards their young. But when they get old enough to look after themselves, then he'll eat them quick enough, so after all it is a virtue that does not wear very well. Among his numerous vices, perhaps the two worst are, his strong cannibal propensities among the fry of his betters; and a large mouth full of nasty sharp teeth, that have an annoying way of cutting through your snood or trace, if you are using gut.

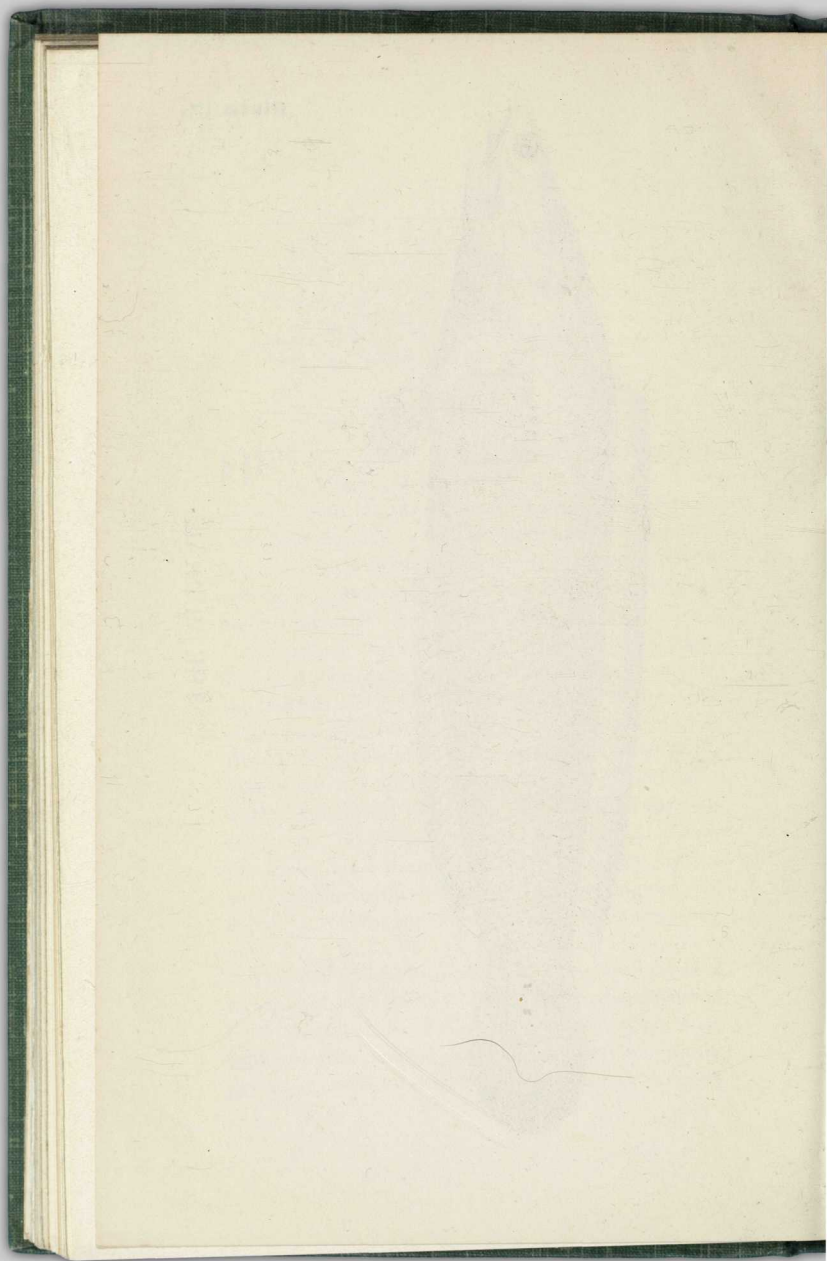
You will find Murrel also in the deep still pools of rivers, and sometimes will take them when spinning for Mahseer. Also I have taken them when float fishing with a worm; so he is a pretty ubiquitous gentleman taken altogether. But he is a very shy



Plate IX.



THE MURRELET.



fish, a fact which you will do well to remember, if you are fishing exclusively for Murrail. Perhaps the most deadly way of fishing for them is with live-bait.

First you must have a good-sized float, and a trace (of gut is the best, though you risk it's being cut, still wire even if fine weighs down your bait rather cruelly) of a couple of yards long, with a number 3, 4, or 5 Limerick hook at the end. Next select a small fish of  $3\frac{1}{2}$  or 4 inches from your bait kettle, and pass the hook through his upper lip (or the skin of the back just in front of the dorsal fin is better), taking care to injure him as little as possible. Then put on enough lead about 8 inches from your bait to keep him under water. Also it is as well to have a small swivel between the float and bait.

Then having fastened your trace to your running line, swing your bait carefully into the water; either hold your rod, or fix it with the reel running free. Strike when your float moves off and disappears under water.

In fact all that I have said with regard to live-baiting for Megalops, may be taken to apply to Murrail as well.

Another excellent way of catching Murrail is that, much adopted by the natives, of setting trimmers with live frogs. Select some place where the water is fairly deep, close under the bank, and also where some tree or branch extends out from the shore. Have a hook (No. 3 Limerick is a good size, or you can use a treble if preferred) fastened to a short length of flexible wire, and the wire fastened on to a piece



of good stout twine. Now take a live frog—one of the small brown ones are the best—and gathering up the loose skin on his back, pass the point and barb of the hook through this. Then pass the frog and line over any branch jutting out above the water, and lower gently till the frog sits naturally on the water and the hook is relieved from his weight. Lastly bind the loose end of twine round some solid object on the bank, and go away and set other trimmers in like fashion.

If however, you want the fun of playing the fish, you can use your running line instead of the twine and fix your rod on the bank. In this way, though, there is not always the same likelihood of the fish being hooked, because the reel lets out line; while in the other way, the line being taut, the fish hooks himself immediately on taking the bait. And you yourself must keep away from your trimmers, as the Murrel is a shy fish as I said before, and will not come feeding on the surface if he sees you anywhere near.

Still you must not be too far away, as frequently the Murrel will wriggle himself free if given time. He is not such a fool as to grab the frog and hook suddenly as a rule, and I have seen a Murrel miss a frog four times running, sooner than seize him promiscuously. And again there is not much fun in playing a Murrel, he is rather like an animated log. I remember one day fishing in a pool, in a river, which I was told held small Mahseer, and in two consecutive casts I caught a 3-lb. Mahseer and a 10-lb. Murrel. I was fishing with fine gut and a

small spoon, so dared put no strain on ; however, I landed the Murral in eight minutes, while the Mahseer took ten to land. Why the former never cut through my gut was a mystery to me, he must, I think, have got it in between two of his teeth.

However this is not always the rule, as I have had a Murral on in strong water, that gave very excellent play, and took quite a time to land.

Another plan of fishing for Murral, which though I have never tried it personally, I hear on excellent authority is sometimes very successful, is dapping with a dead frog. This is apparently the plan to try when you get one of those ponds so covered by water-lilies that ordinary fishing is out of the question. A short stiff rod is necessary, and on the end of your running line, a short wire trace with a stout treble hook. Hook the dead frog through the loose skin on his back and then commence to dap (like one does for pike at home with a dead fish in rough water) between the leaves on the pond. If a Murral is kind enough to take your bait, lift him out without ceremony.

One point worthy of notice with these fish, is their curious faculty of being able to live in the sun-dried mud of a tank.

There are several tanks which hold Murral, which run dry for four or five months every year, and the fish in them aestivate during all this time in the dried mud.

The Murral too, is one of the few fish which can breathe our air direct, owing to an air-cavity he carries in his internal mechanism. In looking at

the illustration of the Murrel do not be led into the error of thinking that his head is long-shaped like that of a pike. In reality, the head and neck are the broadest part of the fish.

He is very ugly, and usually has reddish eyes. The Murrel (*ophiocephalus striatus*—Beavan's *O. Marulius*) belongs to the family "Ophiocephalidæ," or Snake-headed fishes. He has several smaller cousins, such as *O. punctatus*, and *O. gachua* who are rather like him in appearance.

*O. Striatus*, L.l. 51—57; D. 37—40; v. 6.

*O. Marulius*, L.l. 59—64; D. 49—55; v. 6.

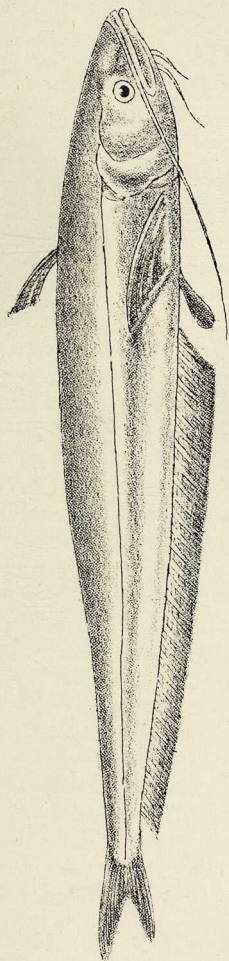
*O. Punctatus*, L.l. 40; D. 29—31; v. 6.

*O. Gachua*, L.l. 40—45; D. 32—33; v. 6.

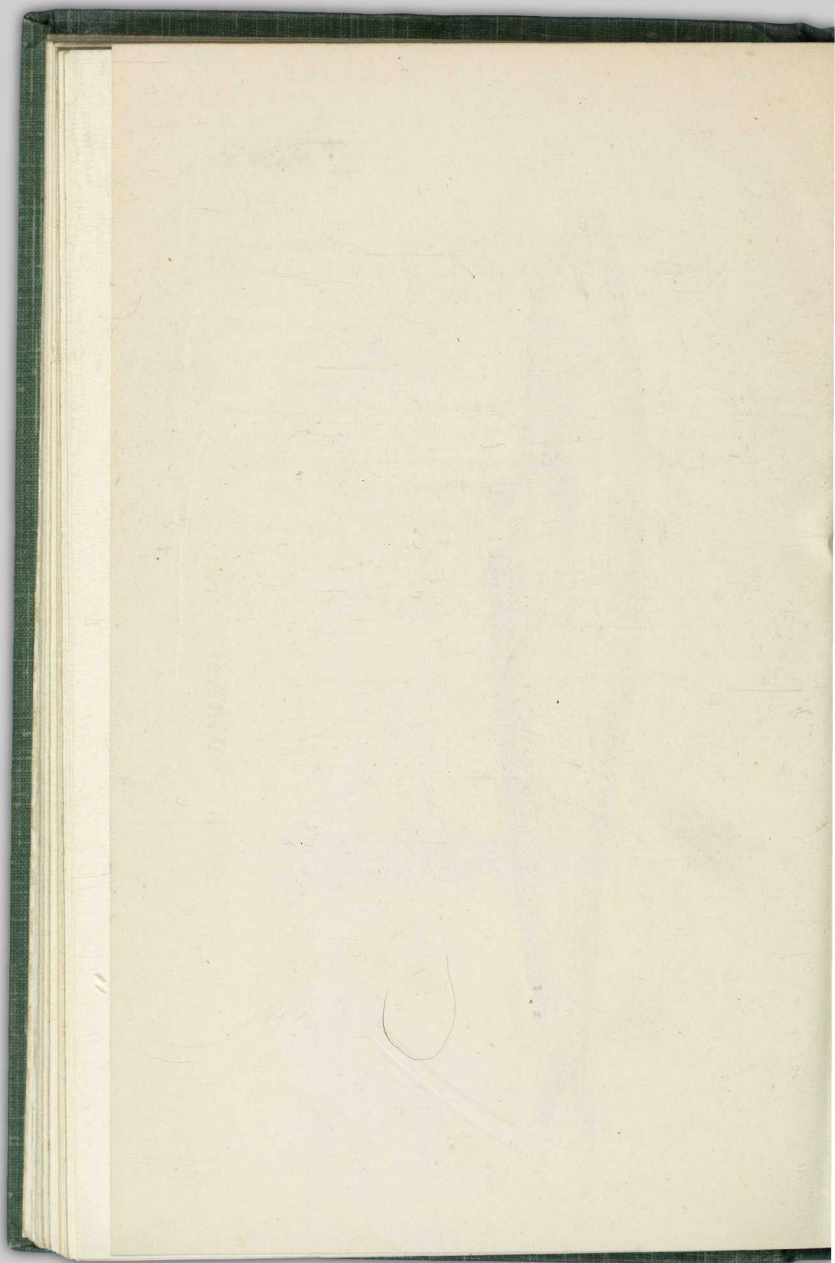




Plate X.



WALLAGO ATTU.



## CHAPTER VIII.

### THE SILURIDÆ.

**T**HIS is one of the largest families of fish known, and includes over 100 genera. They are scaleless fish and have fleshy feelers attached to their mouths.

These barbels are often of great length and generally numerous. Only five are mentioned in this book, three in this chapter—the other two being the Butchwa in Chapter V, and Macrones in Chapter IX.

Of the three larger Siluroids treated of here, I only know Nos. 1 and 3, but No. 2 from all I hear is amenable to the same tactics as the others.

All three are commonly called freshwater sharks, owing to their voracity, their formidable teeth and their general ugliness.

One peculiarity of all Siluridæ is that their skins are scaleless. The three are :

- (i) *Wallago Attu*—sometimes called “Bawalli,” also Mulley.
- (ii) *Silundia Gangetica*.
- (iii) *Bagarius Yarrellii*—sometimes called the Goonch.

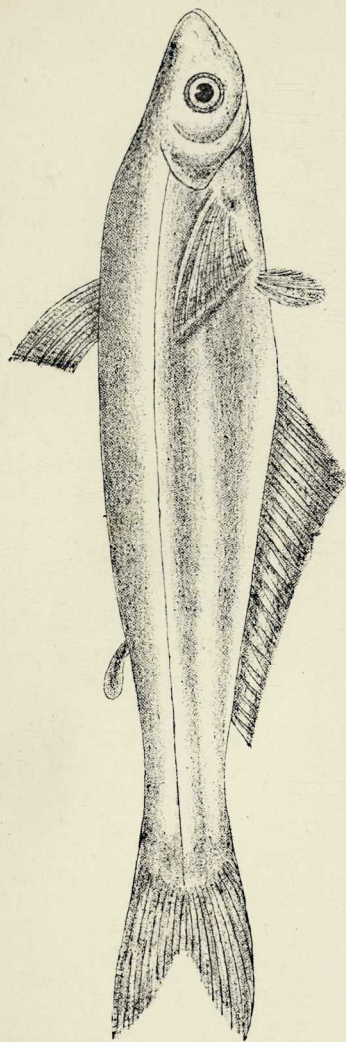
One of these latter fish holds, I fancy about the record in size, for a fish caught honestly on rod and line. This was a fish of some 5 ft. 8 inches in length, weighing just under 138 lbs. and was caught by a Mr. Van Cortland in the Jumna.



Though these fish will occasionally take a phantom or dead bait, by far the most paying way of fishing for them is by live-baiting. Take any small fishes (except those of the Murrel species, which must come up to breathe) of 3 to 6 inches long, and fish precisely as laid down for live-baiting for Mahseer. Remember also that their formidable array of teeth makes a wire trace essential, and your rod and line should be strong, as though these fish give none of the play of the Mahseer, they run to great weight, and put a very fair strain on the line when being towed in.

All three are river fish, though Wallago Attu is a great frequenter of tanks; in which, however, unless you catch one, you will not suspect their existence, as they prefer keeping down in the depths and are not partial to the light of day. Apparently Wallago Attu is extremely short-sighted, at least one would judge so from his very small eyes and tremendously long feelers, the latter evidently of use to him in locating his prey. Of the two I know, the Goonch is I think the more sporting fish, as he takes your bait in a business-like way, and gives very fair play keeping well down the while. Mind you here I am speaking of the goonch of the smaller rivers, not the monsters of the Ganges, who apparently give but little play. Goonch seem generally to lie in the heavy water of a rapid, and appear to take in coloured water as well as clear. They have most formidable teeth which you will be well advised to keep your fingers clear of when extracting the hooks, as even a prick from their teeth

Plate XI.



SILUNDIA GANGETICA.

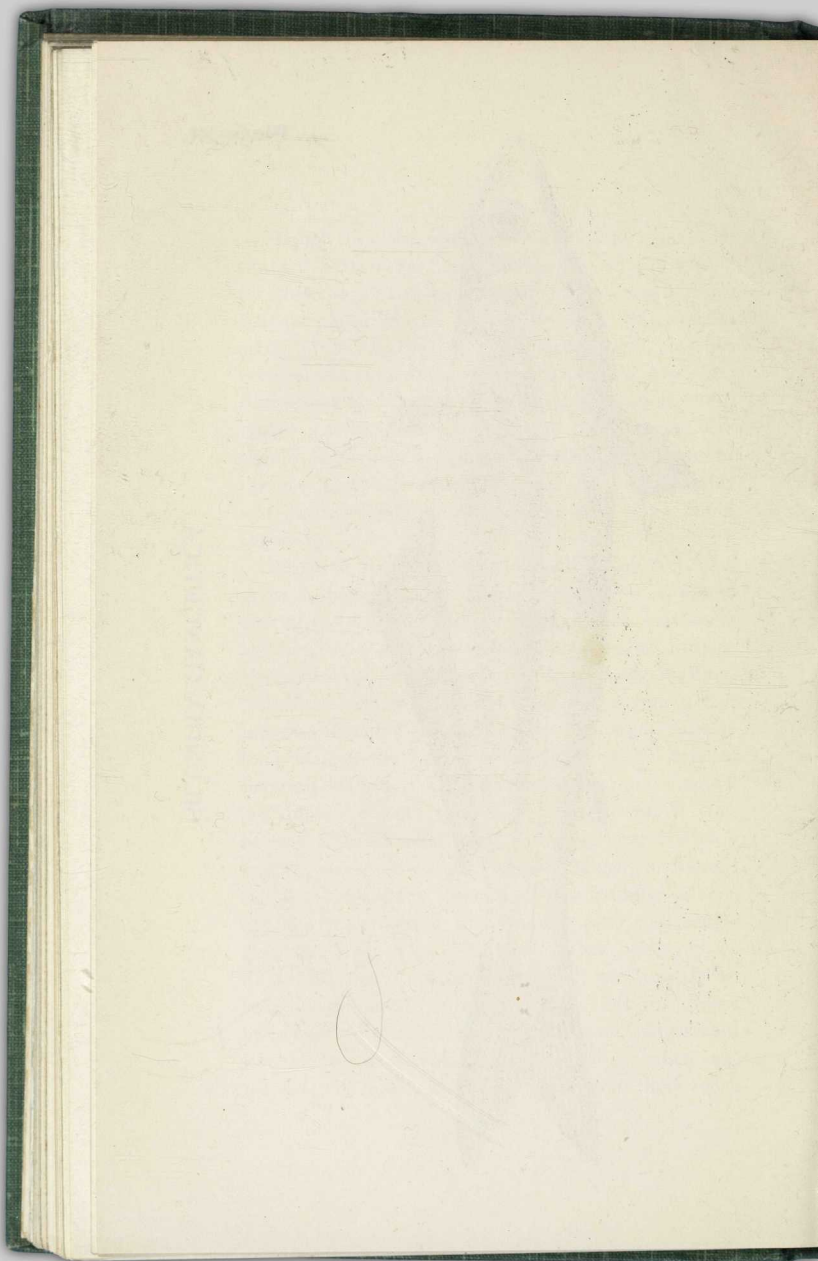
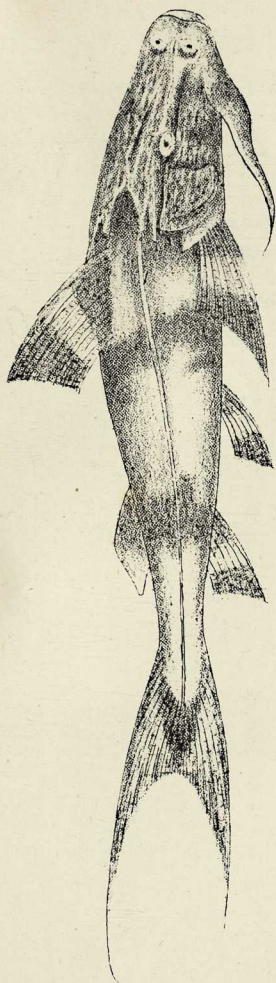
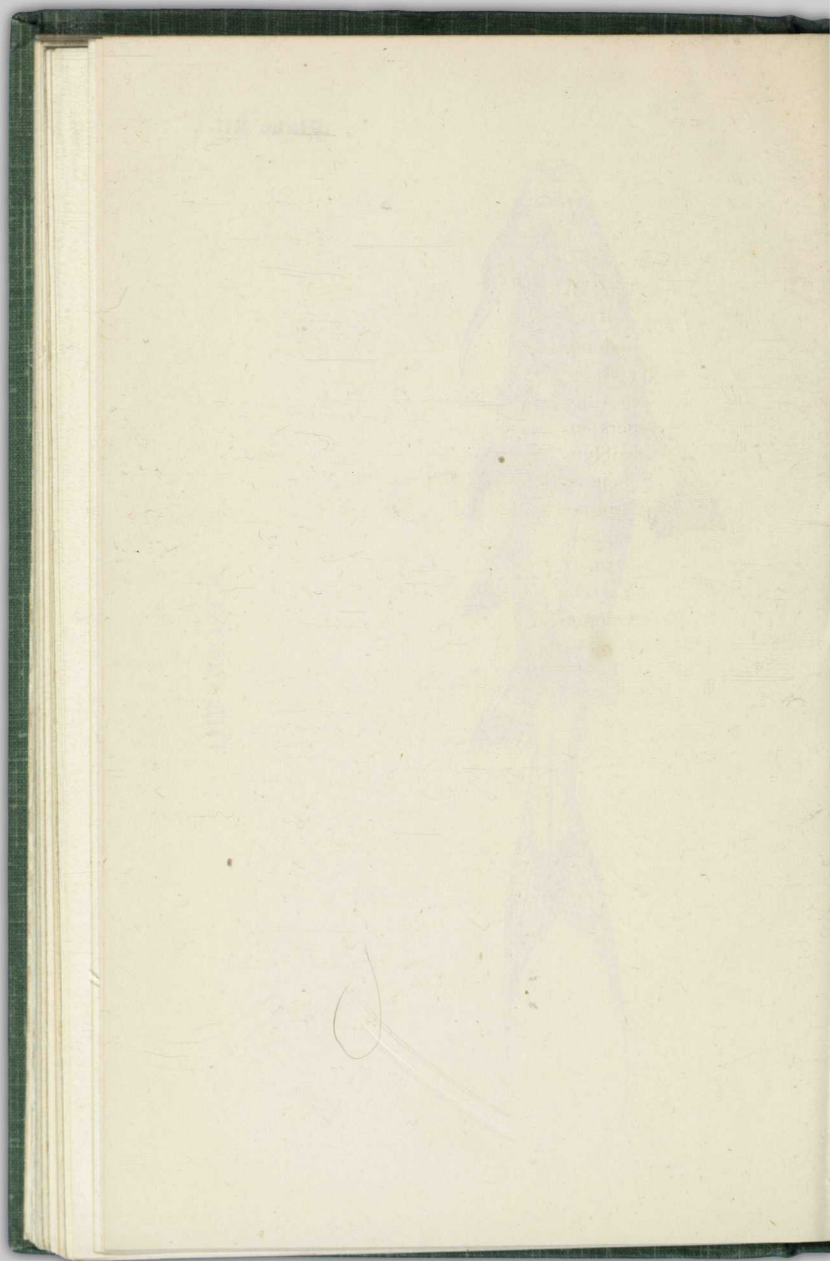




Plate XII.



THE GOONCH.



often gives one a painful finger for a day or two. And do not judge the Goonch by his picture, he is not really quite such an ugly beggar as his portrait would lead one to suppose. Wallago Attu too can give very good play for a minute or so, when taken in a rapid; after that however he gives up and comes in like a log. He also has awful teeth; one really wonders in looking at the siluroids what they can possibly want with such an appalling array, as none of their victims can require all the tearing and masticating such a mouth full of teeth would lead one to suppose.

Wallago Attu, D.  $1\frac{1}{4}$ ; V. 8-10; A. 86-93.

Bagarius Yarrellii, 8 barbels; A. 15; 6 fins on belly.

Silundia Gangetica, 2 barbels (minute); Anal, 40-46, 6 fins on belly.





## CHAPTER IX.

### FLOAT-FISHING.

AND now let us leave the rivers altogether, with their rapids and their pools, and the glorious scenery, and having returned to our daily tasks again, let us look round and see what we can find in the way of our favourite sport, to solace ourselves with nearer home.

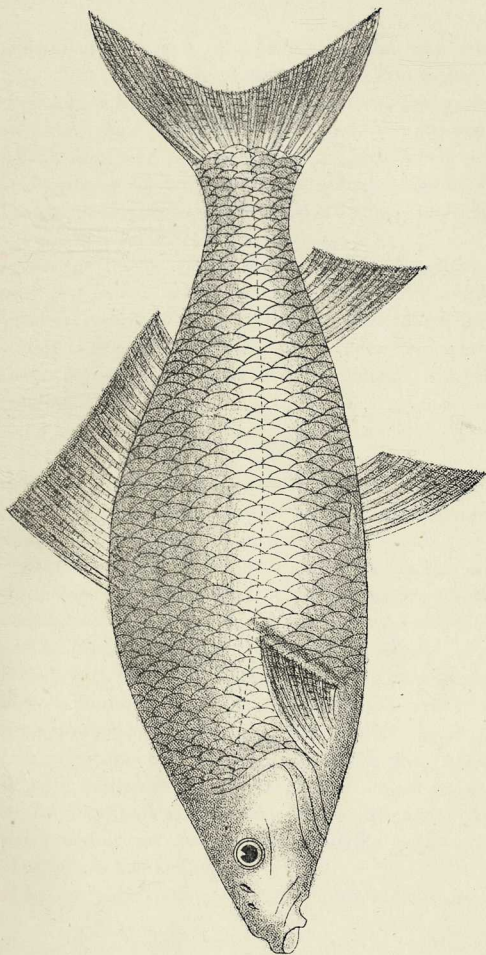
In many stations in parts of India, one will find tanks of sorts, either Water supply, Temple, or Irrigation tanks. These latter are not as a rule of much use, as in the hot weather they usually run dry, and the fish in them never attain to any size.

The temple tanks may be good for fish, except that they are so often netted on contract, which of course ruins them for our purpose.

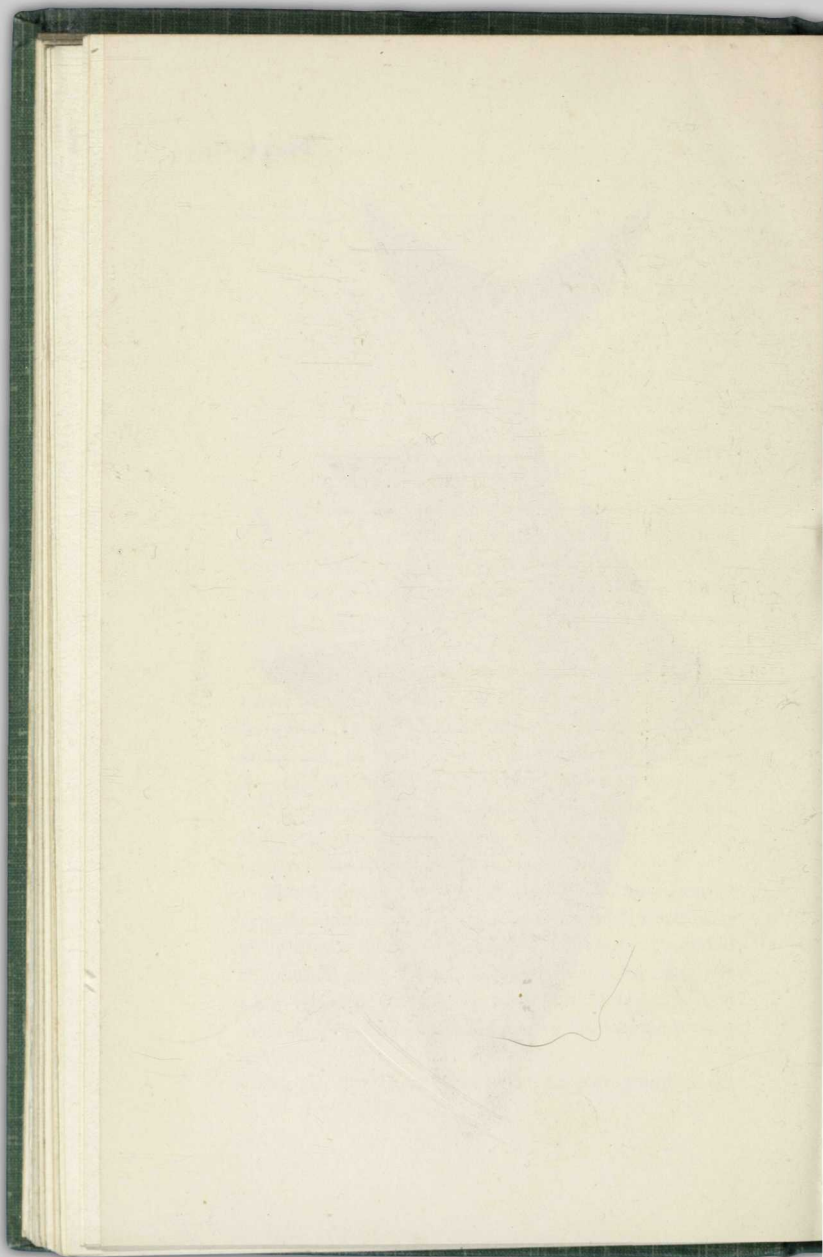
There remain only the water supply tanks, and a certain number of private tanks in which netting is prohibited. These will be what we want. Provided that these tanks are fed during the rains, by channels from rivers or canals, through which fry can find ingress, then there should be very fair coarse fishing in them.

But do not think that you are just going to sit

**Plate XIII.**



**LABEO.**





and watch your float till it bobs, and then haul out fish. The Indian fish is not honest, in fact some of them are most accomplished thieves, time and again will they steal all your bait, and hardly move your float. In fact, if you are not a very keen fisherman, it is quite on the cards that you will give up float-fishing altogether and stick to small game shooting, till you can get to your rivers again.

But for the benefit of those few keen anglers, I will give a few notes on some of the fish worth catching; though to my readers, who follow me through these next pages, I most earnestly commend that very excellent book of Mr. Thomas' "Tank Angling."

#### THE LABEO.

Here is a fish, a most awful thief, and a fish that will go far to breaking your heart, and sickening you with float-fishing altogether.

In all float-fishing I would recommend you to use those most excellent floats called detective floats, evolved by Mr. Thomas, a full description of which will be found in the chapter headed Tackle.

Fish with paste, with your bait just resting on the bottom, and ground-bait the water round with wet bran thrown in between your float and the bank.

It is not much use fishing in less than  $3\frac{1}{2}$  or 4 feet of water—the deeper it is the better. And do not throw your bait farther away than just under the point of your rod, as you cannot strike properly if your bait is too far away.

As for your rod, it should be fairly stiff to admit

of the very quick striking necessary for these fish, and a good length is 10 feet.

A good-sized hook, say No. 2 or 3 Limerick scale, should be used and weighted so as to rest on the bottom. Do not fix on the weight to your gut collar, or snood, as then you have no means of knowing if your hook is resting properly on the ground. A plan that I have found always very successful is to have a short length of gut, say 1 inch, tied to the shank of your hook, and hanging loose underneath.

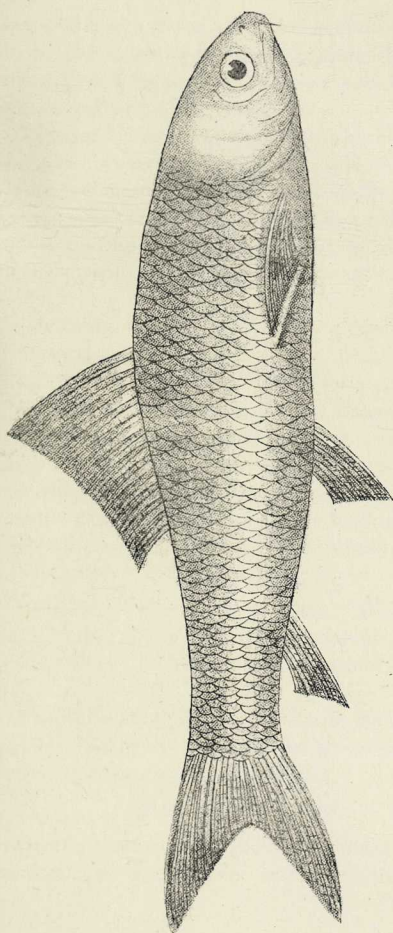
Knot this gut, and pinch on shot, or simplex leads to make up weight required. The lead apparently lies in the mud on the bottom and does not appear to scare away the fish.

Or else bind soft lead wire round the shank of your hook taking care not to block the point or barb in any way. This latter plan is necessary if you mean to have a second hook hanging loose below. I have heard of this being done often; just tie a half inch of stout gut to the bend of hook No. 1, and have a second hook hanging free to lie in the mud. This sounds like poaching or snatching, but is not really so, since the labeo is such an awful thief that it takes all the ingenuity man is possessed of to make even an average bag, except in tanks where they swarm, and then if your sport is good you can dispense with the second hook.

Use good stout gut, or better still Hercules wire.

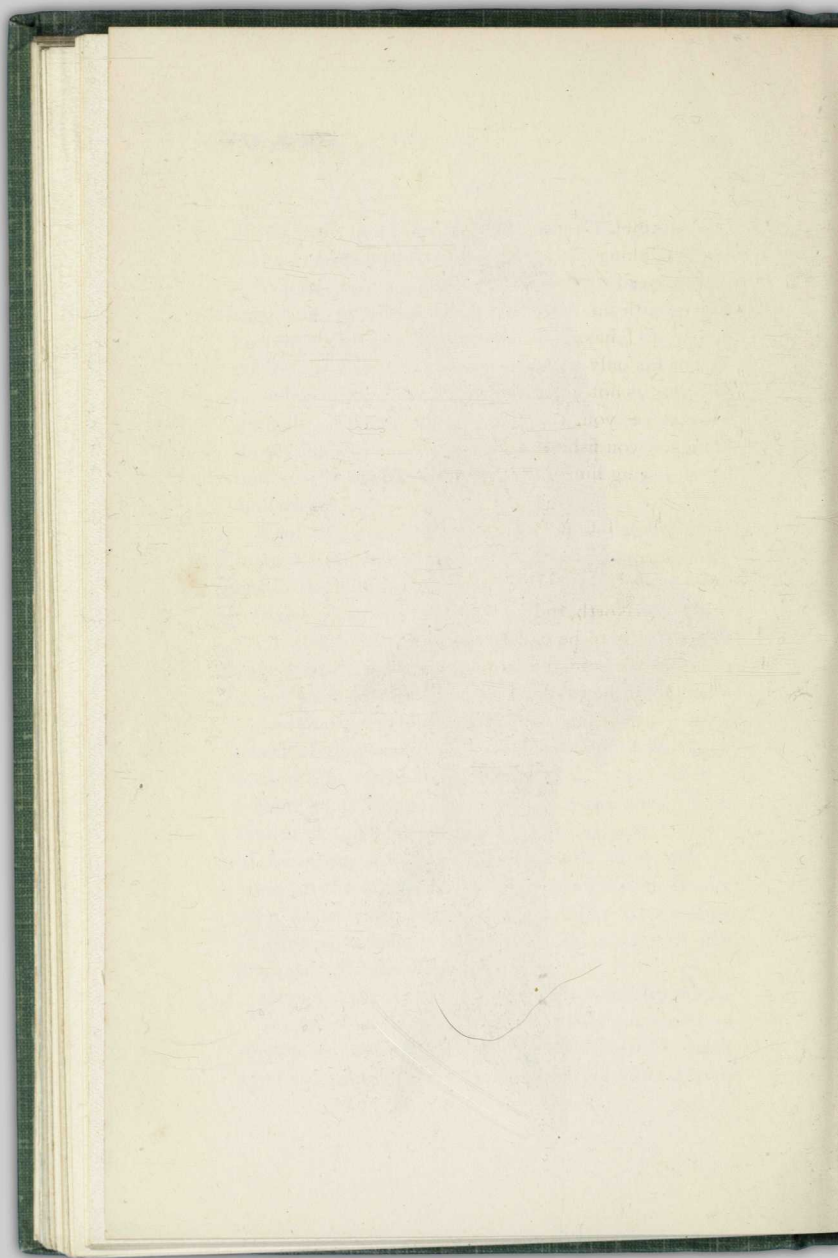
Watch your float and when it gives one or two slow bobs, and then twitches rapidly, strike quick and hard, and you may, or may not get him, as he is

Plate XIV.



THE MIRGA.





an awful thief. When you have caught a labeo there is no mistaking him, as he has a funny little fringed mouth placed right under his snout and is speckled all over with small red spots.

By what I have said above, do not assume that the labeo is only a tank fish. He abounds in some rivers, but is not a fish that you will often catch in rivers since you are generally after nobler game, and unless you fish for him exclusively you are not likely to bring him to bag promiscuously with spoon or fly.

Labeo, L.L. 40—44 ; D. 16—18 ; 4 Barbels.

Then comes

#### THE ROHU.

He is to North India what the Labeo is to the South. He is to be caught the same way, but is I fancy a much bolder biter than his southern relation. He also is to be taken in rivers, and I have occasionally caught one while spinning for Mahseer.

Rohu, L.L. 40—42 ; D. 15—16 ; 2 Minute Barbels.

#### THE MIRGA.

Personally I have never caught a "Mirga," but I am told that the same method of fishing applies to them. They are silvery fishes, with black-stained fins.

The illustration opposite is that of the Mirga, his smaller cousin is so like him, however, that no second illustration is necessary for.

#### THE WHITE CARP.

Here is another fish usually inhabiting the same ponds and to be fished for in the same manner as

the labeo. He does not however run so big, as, though you may expect with luck to catch labeos up to 7 or 8 lbs. in weight, you will not get the White Carp exceeding 3 or 4 lbs. He is a pretty silvery fish, with small red spots on scales.

Mirga, L.l. 40—45; D. 15—16; 2 Barbels.

White Carp, L.l. 42—44; D. 17—19; 4 Barbels.

A good receipt for paste is as follows:—Take 4 oz. of common flour, boil, dry and pound fine. Take 2 oz. of groundnut, roast fine and pound up. Take  $\frac{1}{2}$  oz. of coriander seed, roast and grind to powder. Then mix together into a thick paste. This is the receipt given by Mr. Thomas in his book, and I herewith acknowledge my indebtedness to him. One thing you may add to any baits of this description if you like.

Get the paste to the right consistency by using dry flour or bran, and then add a little clean white cotton wool and mix thoroughly. By this plan you will find the bait remains longer on your hook and is not so liable to flake off.

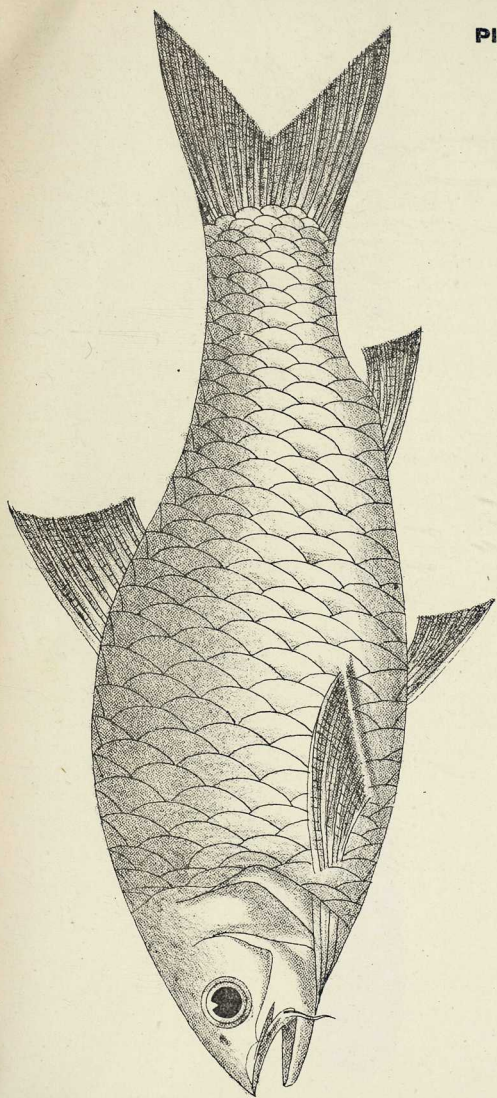
The only disadvantage of this plan is that, after a time your hook becomes rather clogged with waste wool; so that you must settle for yourself, whether or no you will use it. Other paste and ground-baits are given in Chapter XV.

### THE OLIVE CARP.

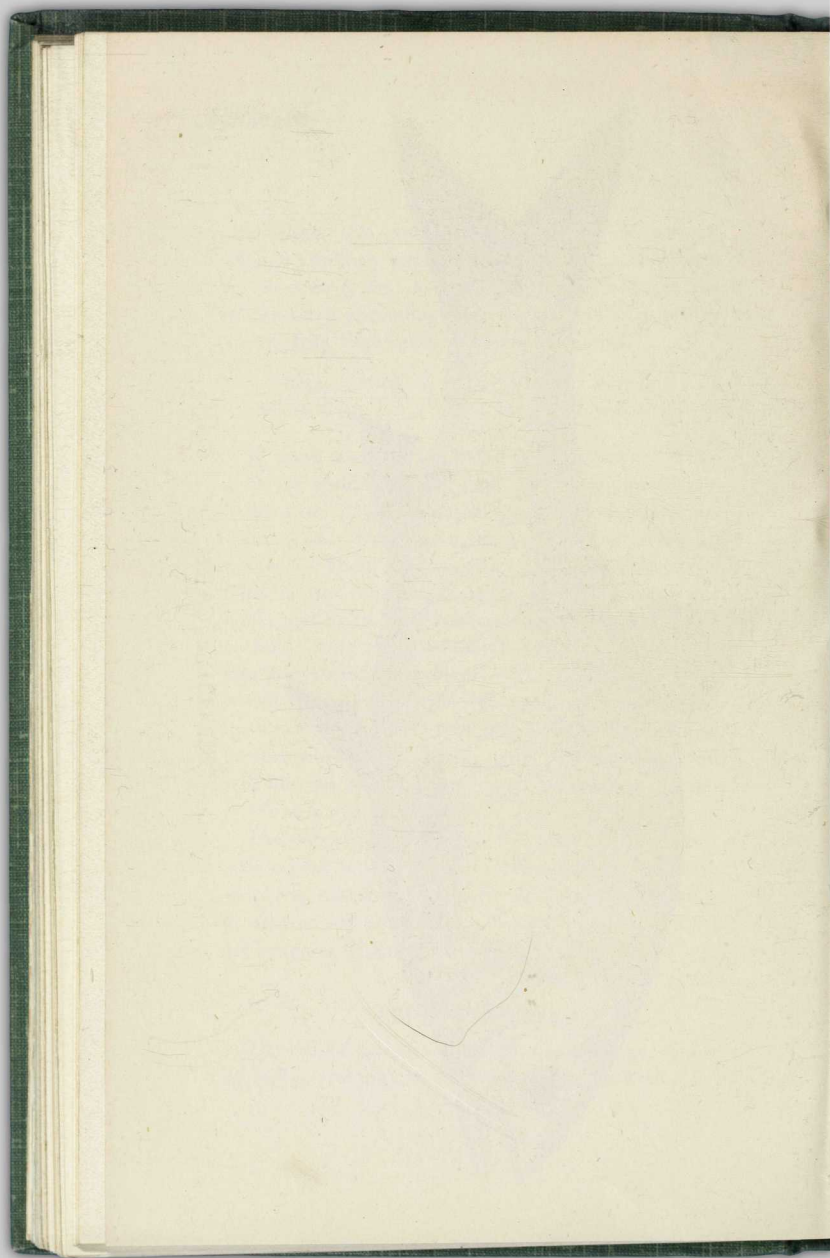
The Olive Carp is a fish that extends over most of India, and may be occasionally taken with a fly,

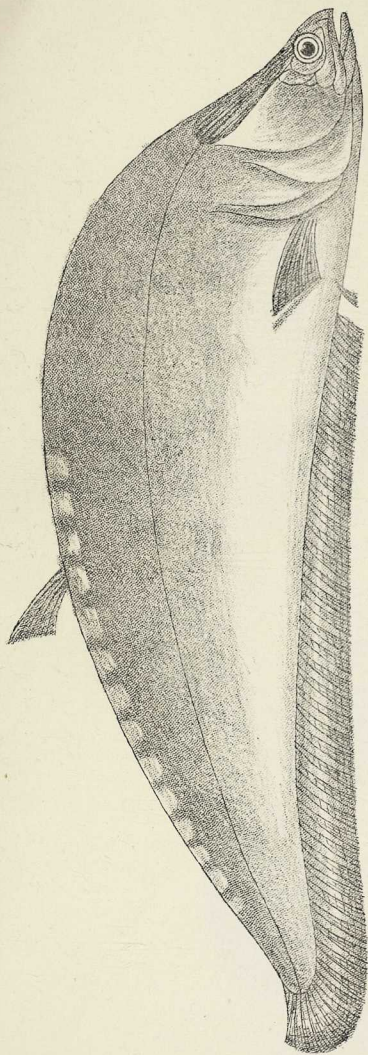


Plate XV.



THE OLIVE CARP.





NOTOPTERUS CHITALA.

(This fish is covered with minute scales, which are not shown in illustration.)



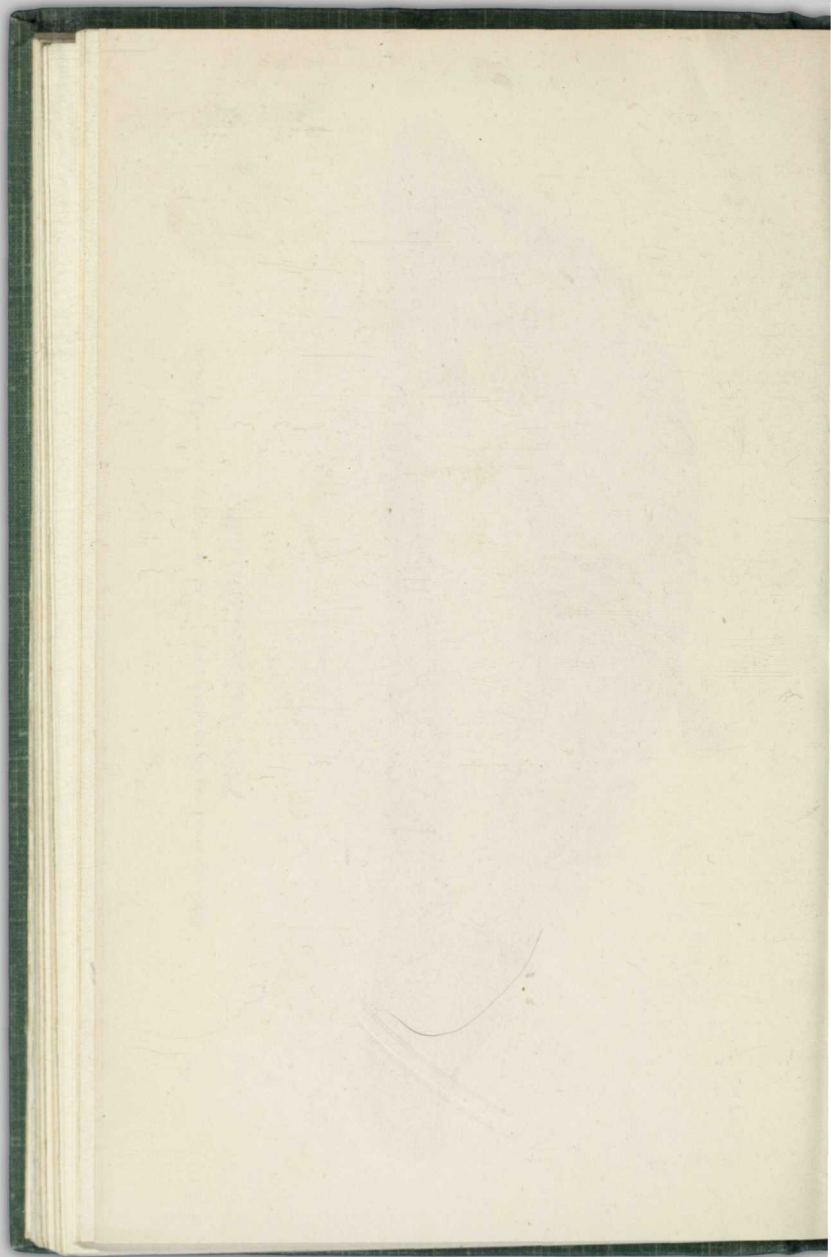
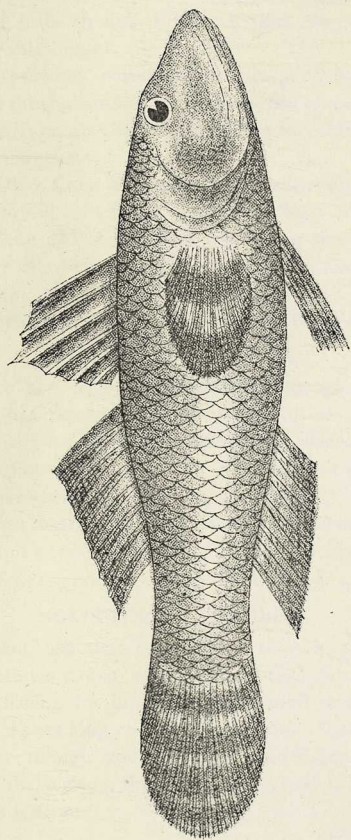
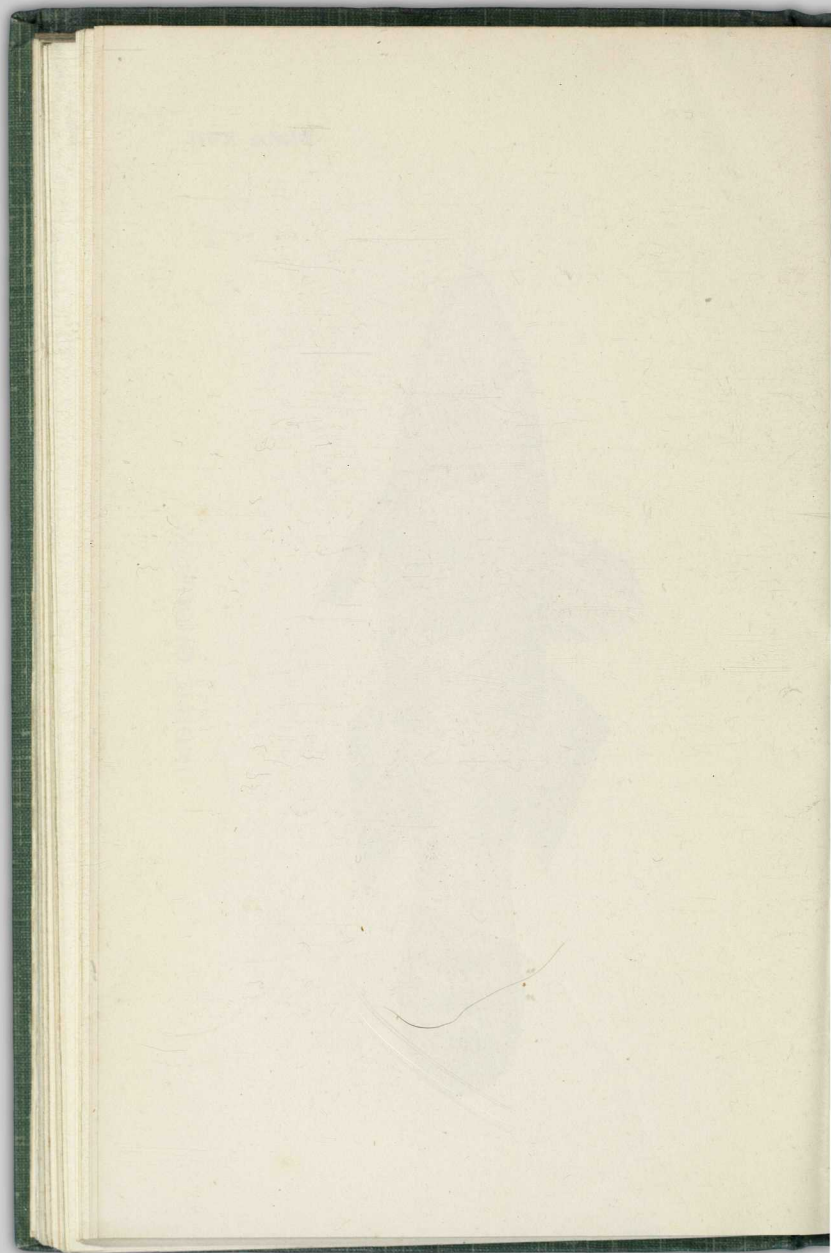


**Plate XVII.**



INDIAN GUDGEON.





but a worm or paste bait seems to suit him better. The largest that I have caught or seen caught weighed  $\frac{1}{2}$  lb. though I believe that they do run considerably bigger.

If float-fishing, watch for a few quick bobs and then the disappearance of the float, the chances are that it will be an Olive Carp, or our next friend the Indian Gudgeon.

The Olive Carp (*B. Chrysopoma*) when small may be recognised by a black spot on the body near the tail. They are an excellent lure to use live-baiting for other fish, being both tough and vigorous.

*B. Sarana* (N. India), L.l. 32—34; D. 3/8; A. 3/5.

*B. Chrysopoma* (S. India), L.l. 28—30; D. 4/8; A. 3/5.

#### THE INDIAN GUDGEON.

He is a very ugly, yellowish, semi-transparent fish with a flat head, and a mouth full of teeth. He runs up to 3 lbs. in weight and is a bold biter.

He is not a fish that you will ever find yourself fishing exclusively for, but he occasionally chips in among his betters, and is an ugly truculent little ruffian and a fearful devourer of fry I should imagine.

*Gobius Giurus*, L.l. 26—34; D. 6 1/9; v. 4/4.

#### NOTOPTEROUS CHITALA.

This fine fish that runs up to 4 ft. in length may be sometimes taken with a worm, though the best way of fishing for him is with a small dead bait, about 3 inches long on spinning tackle. Spin fairly deep, for though you will see these fishes rolling over on the surface, this is only play, and they feed near the bottom.

They give magnificent play when hooked, their shape giving them great power in the water, and they occasionally spring clean out of water while being played.

Do not spin too fast, as their mouths are very small. These fish seem to be only found in Central and Northern India!

He is a silvery fish, with very small scales, and distinct lateral line. Sometimes marked with dark crossbands on the back.

N. Chitala, L.l. 180; D. 8—10; A. 110—125.

#### NOTOPTERUS KAPIRAT

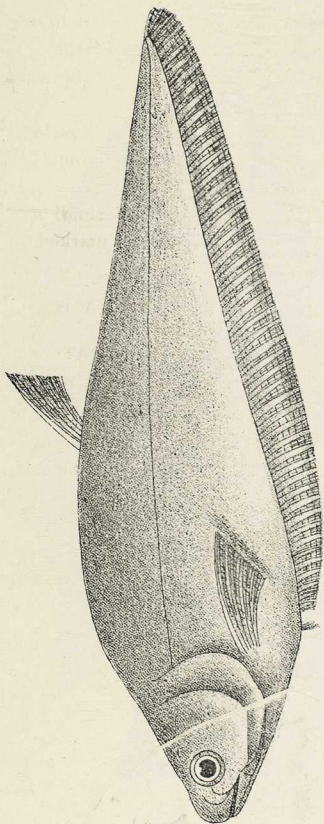
Is a flat-sided deep fish with a very small dorsal fin, and a ventral, anal and caudal fin all in one. He is silvery in colour with minute scales and runs up to about 2 lbs. in weight. A small hook is necessary, as they have small mouths compared to their size. Fish with a worm, or a dead prawn (without its shell) and strike when your float bobs vigorously. With all these fish, have your bait resting on the bottom.

He is rather a pretty fish when first taken from the water, also he gives good play for his size, but his mouth being small and very tender, you will lose a certain number through the hook-hold giving way.

N. Kapirot, L.l. 225; D. 7-9; A. 100—110.

#### ETROPLUS SURATENSIS.

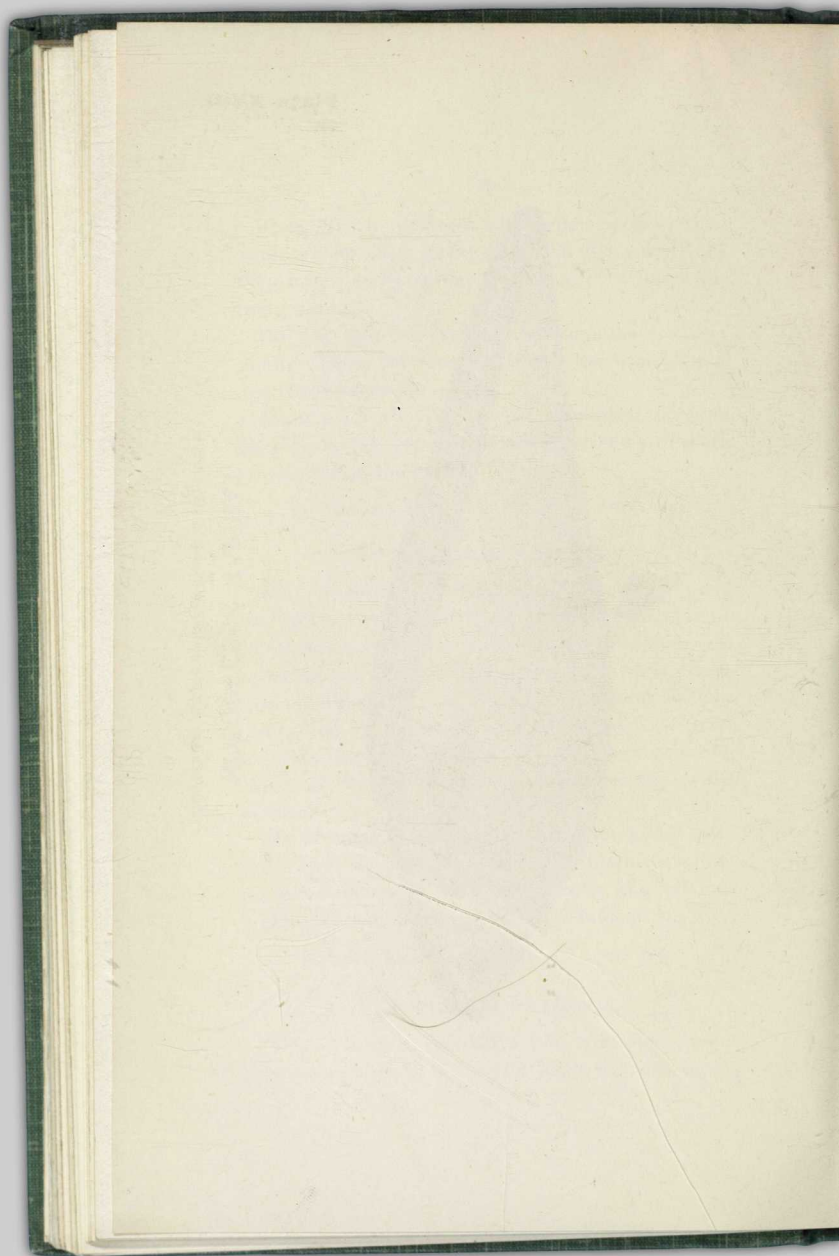
This is such a jolly little fish, that one cannot help being fond of him. His looks too are in his

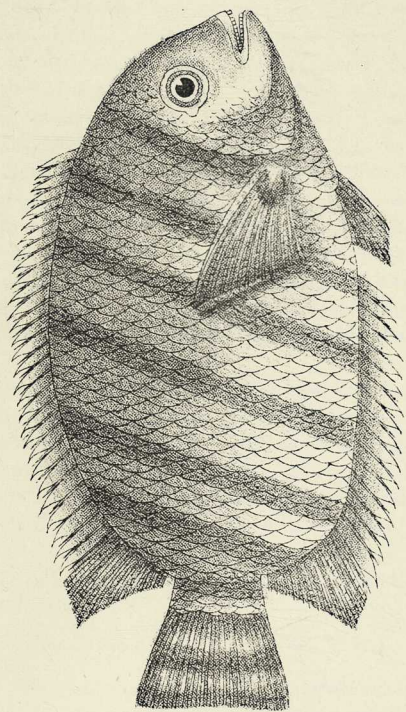


NOTOPTERUS KAPIROT.

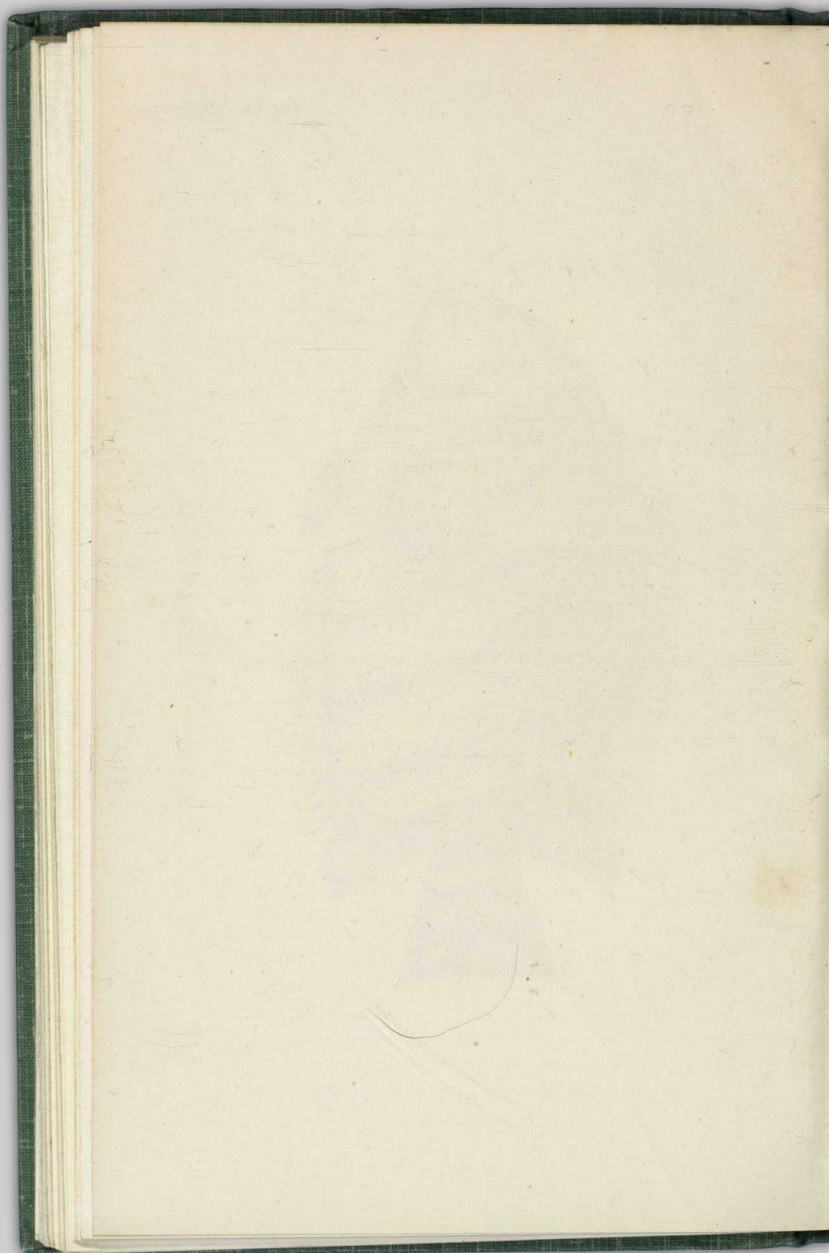
(This fish has minute scales not shown in illustration.)







ETROPLUS SURATENSIS.





favour, and when on the feed he is a more honest biter than most Indian fish. He is a flat-sided fish (with body elevated and compressed) with greenish transverse bands, and little white spots, and he has a funny little mouth with prominent teeth, rather like that of a small monkey. He feeds chiefly on weeds, though will take a small worm. I believe that they run up to 2 lbs., but I have never caught them over  $\frac{3}{4}$  lb. myself. A 2 lb-er should give excellent sport, as their shape gives them great power in the water, and they are game fish for their size.

In fishing for them I found that it was best not to strike, but when your float signalled a bite, to pull the line fairly slowly towards one, and generally the fish seemed to hook themselves while making grabs at the worm.

They are pretty little fish, and well worth transferring to an aquarium. In one bungalow we lived in we had a small tank, size 6 ft. by 4 ft. and 2 ft. deep made, in which we put any small fish we caught, and we derived much amusement and a good deal of instruction watching their habits.

In angling for this fish, do not have your bait resting on the bottom, but about 1 to 2 ft. below the surface.

*E. Suratensis*, L.l. 45; D 18-19/14; V. 1/5.

He has a smaller cousin, *E. Maculatus*, almost prettier in colouring than his big relative, whom you may sometimes catch. Though his mouth is tiny he is a villainously greedy little beggar, grabbing at worms almost the size of himself. His colour is

usually canary yellow, with horizontal rows of golden spots, and 3 or more dark blotches along the middle of the side.

E. Maculatus, L.l. 35; D. 18/10; V. 1/5.

MACRONES PUNCTATUS, or

SEENGHALA.

GULIO.

CAVASIOUS.

TENGARA.

This fish (belonging to the Siluridae family) is commonly called cat-fish down South, or else by its Tamil name of Kellete. In the North it is called "Tengra." It is a fairly common fish abounding in most tanks, and also in some rivers. The big ones are to be caught spinning a natural bait, and by live-baiting, while the smaller ones will take prawn or worm. They give very fair play for their size, have large mouths and are bold biters. When handled they give vent to a curious squawk. Their dorsal and pectoral fins are armed with sharp strong spikes, the one on the dorsal fin being especially formidable and capable of inflicting a nasty wound. I do not fancy that any other fish would care to tackle one, though I have seen a snake about 4' long with a  $\frac{1}{4}$  lb. cat-fish in its mouth, trying for nearly half an hour to kill it. After watching him for a good time I lowered my hook under the snake and caught him up. Once on the bank he let go the fish, which lay there bleeding and apparently dead: but no sooner did I touch it than it appeared lively enough, and on being returned to the water swam gaily away as if

nothing had happened. The Tommies in Madras catch large numbers of these cat-fish in the fort moat, using worms as bait.

M. Punctatus, A. 11; D.  $1\frac{1}{7}$  0; about 10 black spots along L.I.

M. Cavasious, A. 11; D.  $1\frac{1}{7}$  0; all fins except A. dotted black.

M. Tenggara, A. 10; D.  $1\frac{1}{7}$  0; 4 dark bands along side.

M. Gulio. A. 14; D.  $1\frac{1}{7}$  0; (spine strongly serrated).

All above 8 barbels, and long adipose fin.

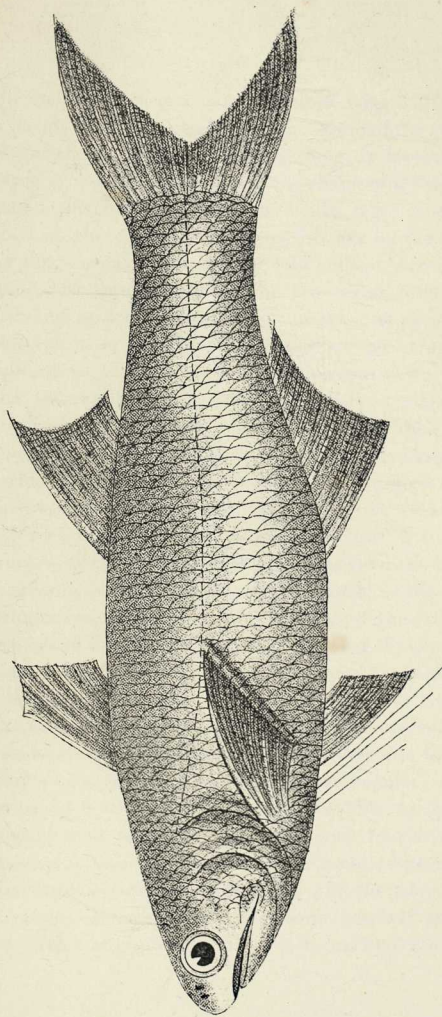




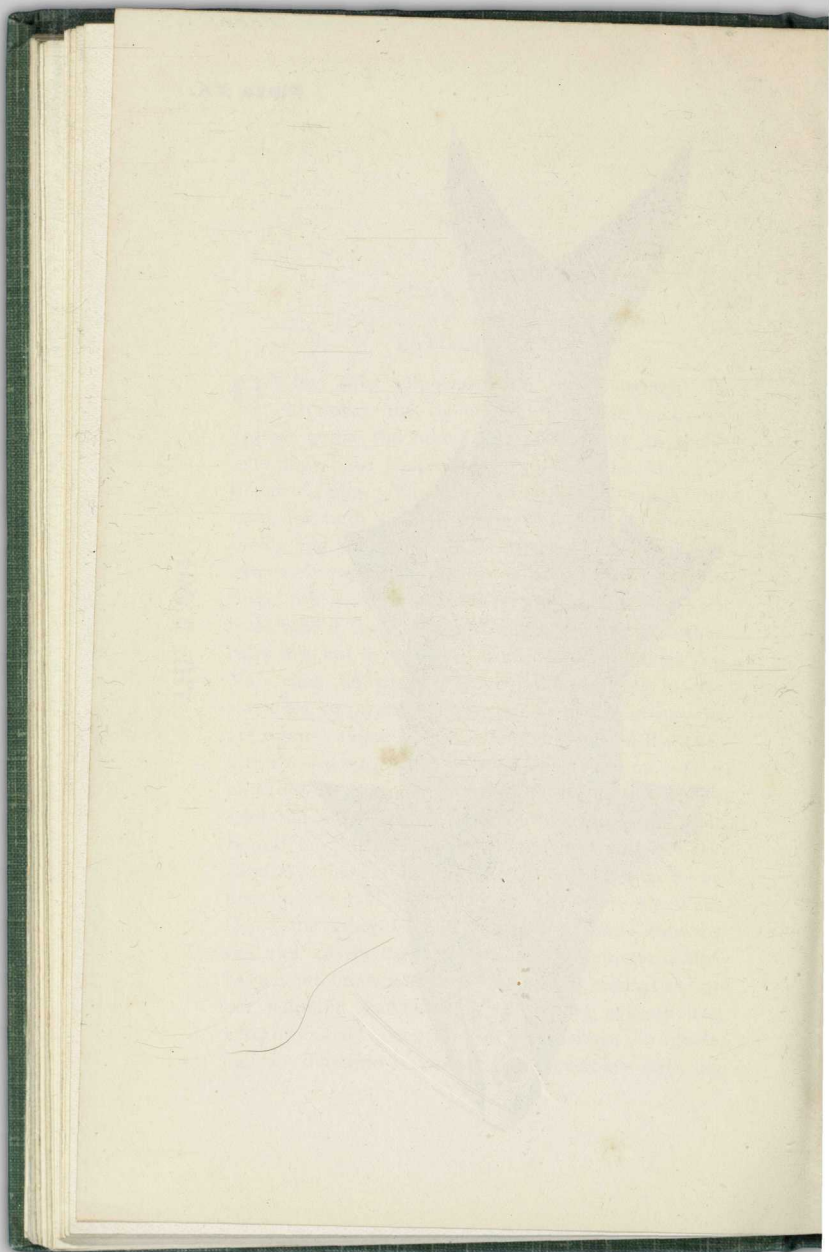
## CHAPTER X.

### ESTUARY FISH.

**O**F the most important fish to be caught in estuaries, the Bamin and the Nair (or Cock-up) are by far the best known, especially by those who have been lucky enough to visit the Malabar Coast of India. The style of fishing is much the same for both, only with the Nair fish use stouter tackle and a bigger bait, as they run large and are extremely powerful fish. It is of no use trying for these fish except when they are on the feed; at least such is the axiom laid down, but like all other rules it is not inviolable. Both the Bamin and the Nair may be caught from boats, either in the estuaries, or on the bars, or out at sea. Unless you are a good sailor however this method, in the two latter cases will by no means appeal to you. It is on the West Coast of Southern India that these fish seem to be best known, though I have frequently seen Bamin on the East Coast, notably at Ennur near Madras, where the mouth of the Kusastala river forms a fine backwater with the sea. On the West Coast the fishermen put out two or three miles to sea and catch them with nets, though they also have hand lines, which are a clumsy imitation of our spinning tackle, but which are nevertheless extraordinarily effective, on occasions, in their hands. The line is wound in an ordinary ball, to



THE BAMIN.





the end of which is a short length of wire ending in a large double or treble hook. Around the shank of the hook, which is 4 or 5" long, is fastened a piece of wood cut roughly in the shape of a fish and round this is tied a piece of white rag. Then as soon as the man sees that the fish are on the feed, he slings in his rough spinner and pulls it rapidly in hand over hand, repeating the process at intervals. If taken by a fish, there is no question of play, but the victim is hauled in as quickly as his struggles will allow. Occasionally the fishermen will see by the behaviour of the small fish, that a shoal of Bamin are on the feed out at sea, and then surrounding them in their boats the fun is fast and furious for a time, the men hauling in a fish on their lines almost at every cast. But by far the pleasantest way to fish for both Bamin and Nair, is to spin from one of the numerous bridges that span the backwaters near their mouths; bridges such as the road bridges near Tellicherry and Mahè, and the railway bridges of Ellattur, Mahè, etc. Around the wooden piles of some of the old road bridges, fish seem to congregate at certain times of the tide, and besides the advantage you have of being well over your fish you have not the cramped and uncomfortable feeling that a boat generally begets in most people. Now as to the time to fish. You will be able to collect simply tons of advice from all your friends, and most of it you will find differ in some respects, so that by the time that you have got the advice all carefully sorted out, the conclusion you will probably arrive at, will be—that a rod, reel and spinning

tackle are necessary, and that you can fish at all or any times *if* the fish will take. And if you take the advice of the native fishermen also, you will feel inclined to tear out the few remaining grey hairs left to you. For you go down at 8 A.M. and spin, catching nothing, the native says "Ah wait till 12 o'clock Sahib." You wait, and catch nothing but a mild sunstroke and get an awful thirst. "Five o'clock is *the* time, Sahib" is their next condoling remark; and darkness falls on your unprintable remarks to your mentor. "But Sahib, what can do, this hot weather, you come 4, 5, 6 months then catching plenty fish." And when you get home and peruse your copious notes, you will find that one friend has told you "I fished in cold weather, also during rains—fair sport—but the native fishermen all said "Ah you coming hot weather Sahib, catching plenty fish"!!! But once you have had some luck and begin to know the habits of the fish, then such sorrows will more or less fall from you. There is no doubt that the fish *do* take better at certain periods of the tide, indeed at some periods they will not take at all, not being there apparently. If you have leisure, go down your first day and taking your breakfast with you prepare to spend the day by the water side. You may find it warm at midday, but usually in the hot weather on the West Coast a cool breeze off the sea tempers the heat and renders it quite bearable. Generally as soon as the tide commences to flow (*i.e.* from the sea) if you are standing on the bridge, you will see shoals of small fish—mullet—swimming about, and soon will come

great splashings and plungings and you will awake to the fact that the big fish are on the feed. Now comes your time. Having got your tackle all ready (I suppose that I should have started this chapter with tackle required, anyhow now it must come later) mount a small dead mullet about 4 to 6" long on your spinner and cast it in wherever you may have seen big fish on the move, and spin slowly, letting the current swing your bait round—if you are fishing on the side away from the sea—otherwise pull your bait across letting it just swing under the piers before lifting it out. And if you are taken, look out, the fish are powerful and run out line at a tremendous rate. Even if you cannot see your fish you will not be in any doubt as to what has taken you, the Bamin seizing your bait with a jerk and a rush, something like a mahseer, while the Nair takes it slowly and deliberately more after the Carnatic Carp style. It is rather fascinating if you can see your fish, to watch the different methods of the two. I remember one day fishing from Mahè bridge, and the water being fairly clear I could see what happened quite distinctly. Spinning slowly across between the piles below, one would occasionally see a Bamin dart at one's bait, and either swirl away or there would be an answering scream from the reel. The Nair on the other hand would come up slowly, a great flash of silver, and mouth one's bait turning down with it to the depths below. Then tauten and you find a fish worthy of your skill, play him carefully and hard, as both the Bamin and the Nair, though they will often rush away from the



bridge at first, will try and get back under the piles eventually.

You will not as a rule catch Bamin of over 10 lbs. weight. He has a mouth full of teeth, and gut traces are useless; his mouth also is hard and does not afford the same hook-hold as a Mahseer's does, so with these fish it is as well to add an extra treble. The Nair fish also has a mouth full of teeth, and as he runs to 50 or 60 lbs., good stout wire traces are necessary.

If the fish are not feeding freely, so that you cannot keep casting your bait to a rising fish—and on some days the fish never seem to come properly on the feed at all—then try spinning between the piles beneath your feet. Personally I have always found it much better spinning on the side of the bridge towards which the stream is flowing, lean over the rails above one of the supports of the bridge, and having cast your spinner out and away from the bridge opposite the next support, draw in the line letting your bait spin down with the current across the opening between the two piers. Then try the same tactics to the support on your other side. Often although not a solitary fish is to be seen moving, you will suddenly see a flash of silver, and know that you have at last drawn a watching fish from his lair among the piles. Now as to striking for these fish, this is an exceeding difficult question, both of them having such bony mouths, which afford indifferent hook-hold. Of course if you can do so strike as hard as possible. But when a fish takes you suddenly and dashes off like an express train, it's

no easy matter to strike. To do so means that you must lower your point for a second, and that momentary slackening of your line may be fatal if the fish is but lightly hooked. And an additional danger with these fish is that when being played they will frequently spring feet out of water. I have had a big Nair fish on that twice running sprang half the height of the bridge up into the air. Therefore if one must have a rule to go by, strike and that hard, if opportunity offers, otherwise keep as taut a line as possible on the chance of the fish's struggles causing the hooks to work in. Next as to tackle. Too big a rod is not necessary, especially when one may be spinning during the hottest hours of the day, on an unsheltered bridge. A 14' rod with a short spinning top, is a nice length, a stiff top being necessary on account of the bait used being heavy. A good-sized reel to hold *at least* 120 yards (160 yards is better) of stout spinning line, wire traces and a spinner for natural bait. As regards the traces, there is a certain amount of bother with them, since you must remember that you are fishing in water more or less salt, considerably more than less. Personally I have always found the Hercules wire traces all right, also some excellent traces made by Hardy Bros. and called Punjab wire traces. After fishing both the line and trace should be soaked in warm fresh water for a few minutes and then allowed to dry; when dry the traces should be vaselined. As I said before, use as bait, small fish of 4 to 6" long, these should be young mullet, which there ought to be no difficulty in procuring as a rule,

since they abound in the backwaters, forming the chief food of the Bamin and Nair. But in case you cannot for any reason procure them, have one or two phantoms ready for use. But the fish are very canny, I have had a Nair fish come twice at a bait that was a trifle ragged, and turn away both times, and then when I changed quickly to a new bait, come at it again and take it without hesitation. Then spinners. Though I have had good sport with Archer and Crocodile spinners, I have always thought that I have had more runs when threading the bait simply on a big single hook. And if you adopt the latter method it is an improvement to make a mount as follows:—In the Chapter on Tackle I have mentioned a mount of one big-eyed single hook. Adopt this method, only instead of binding wire to eye of single hook take first a strong treble-not too big—or better still a double hook if you have one, and bind wire to its eye, then lay wire up shank of big hook, pass end through eye and bind tightly with well waxed silk all up shank of big hook, letting a space of half to one inch lie between bend of big hook and eye of double hook. Then thread bait as usual till bend of single hook is well home in vent, then sew up mouth through eye of single hook and bind the double neatly by tail. One thing I have heard is, that one can fish all through the monsoon for Nair and Bamin, which is a great advantage as an hour or two a day with one's rod, would be a delightful change from the depressing monotony of life during a West Coast monsoon. One of the chief charms of fishing for Bamin and Nair on the



West Coast, is the beauty of the surroundings, which cannot fail to enchant all lovers of Nature and there are few fishermen who are not to be counted as such. The golden sands and glorious azure of the sea, with the blue green water of the estuary flowing swirling to meet it neath the wooden piers of the quaint old bridge; while around the brilliant green of the palms and mango trees is in vivid contrast to the bright red soil of Malabar; and behind, the great forest clad mountains of Coorg and the Wynaad, tower above all, in a blue haze of shimmering mist. And on the air tempered by the cool sea breezes, lies the langourous scent of the frangipani from the trees nestling here and there among the palms and the quaint little huts.

Bamin, L.I. 75-85; D. 8 | 1/13-15; V. 1/5.

Nair, L.I. 52; D. 7-8 | 1/11-12; V. 1/5.

Under the heading "Estuary Fish" I must mention the Seer, though he is really entirely a sea fish. Unfortunately he but seldôm leaves the blue water, which may be anything from 3 to 8 miles out from the shore, so that unless the heaving waves have no terror for you, he is a fish that you will not be likely to come across except on your dinner table. Should you be a good sailor however, magnificent sport may be had from this, perhaps one of the gamest fish in the world.

Also in this chapter, just a few words about a fish

that you may meet—Lutianus Roseus, the red (rock) perch. When the Bamin and the Nair are off their feed, or at places where they are not, good sport may sometimes be had at certain times of the tide, in fishing for these perch. A live prawn is their special delight, failing that any small live fish; but if live-bait of any sort is quite unprocurable, or you do not want to be bothered live-bait fishing, spin for them just as for Nair fish. A float is no use for this live-bait fishing, as the water is almost always too rough; swing in your bait keeping the line taut, and at the slightest tug strike. In spinning for them it is generally better I find, to spin the side of the bridge towards which the water is flowing. Swing out your bait so that it falls just in by the rocks at the base of a pier and then spin slowly across, and if a perch is at home he will generally dart out from behind some rock and follow your bait across, though if he really means business he will usually take you pretty quick. Sometimes you will see a shoal of them, but more often they seem to hunt on their own. They are powerful fish and immediately they feel the hook, will as a rule make straight for the nearest rocks, so put on all the strain you dare, but if despite you they reach the rocks, the only thing is to get your boatman to go in quick and dislodge the fish, otherwise he will soon, either rid himself of the hooks or saw through your trace. They have sharp teeth so use wire traces. The third road bridge, Tellicherry, fishing up stream side, is (or was when I was there last) an excellent spot for perch. Spinning for these fish I used to think

that the ebb was the best tide, and about 3 hours before low water was my favourite time.

Whiting and other small fry of sorts may be caught in the estuaries, but as—in the case of whiting especially—you are entirely dependent on your boatman for knowing where they lie, you may as well be dependent on him as well for your bait and hints as to tackle. However I may as well just mention that sand-worms are a good bait and use a smallish hook, and stout trout gut.

Before closing this chapter I must just mention that good fishing may be had in some of the harbours of India, such as Madras, Karachi, etc. Unfortunately my experience of such fishing is not enough for me to write much about it, but should you be stationed anywhere within close reach of a harbour, it is worth your while trying to find out all you can about such fishing. And if you are told there is none, do not believe it till you have at least had one or two tries. Go down by moonlight 7-9 P.M. and try with live mullet, big chaps of  $\frac{1}{2}$  to  $\frac{3}{4}$  lb. if you can get them, using strong tackle and fishing off the harbour arm as near the mouth as possible. Twice have I been taken by monsters—and broken alas—fishing thus, and a friend of mine caught a 60-lb. turtle. And if fishing is slow, get a harpoon made and try spearing turtles, they are occasionally bagged like that off the arms of the harbour at Madras.



## CHAPTER XI.

### TROUT CULTURE IN CEYLON, CASHMERE AND ON THE NILGIRIS.

A memorandum on the introduction of trout into  
Ceylon, with a brief history of the Ceylon  
Fishing Club; by T. FARR, Esq.

THE first experiments in this direction were made in 1880 by Mr. Hugh L. Hubbard, a Planter in Udapusellawa, to whose efforts is due the knowledge that trout can be reared in Ceylon waters. He was assisted by Mr. C. LeMesurier, then of the Ceylon Civil Service and by Mr. Hearne, but no record of the number of ova they imported was kept. In 1882 about 20 brown trout (*Salmo fario*) were turned into the Nuwara Eliya stream by Mr. Hubbard, and in 1904 a fish of 14 lbs. was captured in the lake. This may have been one of the original 20, but trout are not supposed to live so long, and it is a well-known fact that a brown trout placed in the dam at Oliphant Estate attained the weight of 3 lbs. in 18 months. In 1882 and 1888 the European planters and Civilians subscribed liberally, and from that date upwards of Rs. 27,000 have been expended upon the introduction of brown trout (*Salmo fario*)

and rainbow trout (*Salmo iridens*) into Ceylon. In 1890 Mr. Wilson Wood imported *fario* ova, and in 1891 Andrews of Guildford sent out 3,000 ova as a present to Mr. LeMesurier.

In 1892-93 Mr. George Fowler imported at his own expense 22,000 *fario* ova and after that the supply was kept up by public subscription. From 1886 up to 1890 and from 1892 up to the present date the importation of ova has been regular and continuous, and during the latter period thanks to the keen and unflagging interest taken in the matter by Mr. George Fowler of the Ceylon Civil Service and to his care and attention in the hatchery, the experiment was attended with considerable success. Messrs. Andrews of Guildford supplied good and healthy ova, and packed them with care and intelligence. They were well-looking after on boardship, and for some years the outturn of fry was so satisfactory that the Ceylon Fishing Club was enabled to distribute large numbers amongst almost all the upland streams of Ceylon above an elevation of 4,000 feet. In 1899 it became very apparent that *Salmo fario* had not bred in Ceylon waters, although female fish full of ova and male fish in milt had been frequently observed. In view of this, and of some disappointing consignments of *fario* ova, the Ceylon Fishing Club decided to turn its attention almost exclusively to the rainbow species, and the first consignment of 10,000 ova of *Salmo iridens* was imported. The results of this consignment were very disappointing only, 1,500 fry being available for distribution, but

in 1900 a further consignment of 20,000 ova was received. This produced 4,335 healthy fry which were turned down into most of the streams in the neighbourhood of Nuwara Eliya and the Horton plains. Amongst the streams then stocked was a small forest stream running through about  $1\frac{1}{2}$  miles of plateau (grass land) at an elevation of about 6,400 feet. Into this in April 1900 were turned down 200 fry after a rail and road journey of 10 hours. As no other species of fish inhabited this stream and no rainbow trout had ever been put in, these fry were watched with great interest. Their growth was rapid and in less than 6 months after their introduction upwards of 20 fish of from 6" to 8" were counted in the pool in which the fry had been placed. Six months later or in April 1901 the first country-bred trout were seen in Ceylon. These were in parties of five and ten, of two sizes about 2" and 3" in length, distributed over about a mile of water, and 3 months later shoals of 15 and 20 were observed in all parts of the stream.

This established the fact of rainbow trout having bred in Ceylon waters at the age of from 12 to 15 months.

In 1902 larger numbers of country-bred fry and fish of 4" to 6" in length were observed in the Nuwara Eliya and Horton plains streams, and in 1903 it was quite apparent that the country-bred fish had themselves propagated their species. It was however observable in this latter year that the shoals of fry were smaller than in previous years, pointing to the probability that the newly-hatched alevins were



being preyed upon by their voracious predecessors.

Most of the Ceylon streams teem with crabs, fresh water shrimps, snails and the larvæ of numerous flies, whilst the May fly at certain seasons may be seen in thousands on the Horton plains. Frogs too are numerous, and are much sought after by the larger fish, whilst instances have been known of the large green lizard having been taken by both brown and rainbow trout. It is therefore not surprising that given sufficient depth and volume of water their growth is very rapid. Fish of 6" in length, turned down into a stream hitherto untouched at an elevation of 5,000 feet have been known to reach a weight of 2 lbs. in 8 or 9 months.

The streams in which rainbow trout first bred in Ceylon are at an elevation of about 6,400 feet, and are very small with overhanging bushes on their banks, often meeting over the stream and affording complete protection from the rays of the sun, though the temperature of the water could not well have been above 55° fahr. at any time.

A movement is now on foot to take proper advantage of the fecundity of *Salmo iridens* and their adaptability to sub-tropical waters, by securing in England the services of an experienced Pisciculturist to remodel and construct the hatchery in Nuwara Eliya, and to conduct experiments in artificial breeding as carried out in other countries. This if successful would not only make the Ceylon Fishing Club independent of foreign ova for restocking their streams, but would enable it to supply at

a moderate cost all the Hill stations of India and Burma with a regular supply of ova. That annual restocking is essential to meet the toll levied by anglers on the finny population of Ceylon waters, has become very evident, and when the ability to do so is within reach of the Ceylon Fishing Club, the sport to be obtained in some of our upland streams will be of the best. The Horton plains stream which resembles the upper reaches of the Pykara on the Nilgiri plateau, contains many rainbow trout of 3 and 4 lbs. but fish of this size do not rise to the fly as readily as those of from 12 oz. to  $1\frac{1}{2}$  lbs., but on specially favourable days the large deep pools will yield to the angler many a fine fish.

The cause which has led to the non-reproduction of brown trout in Ceylon, *viz.*, the high temperature of the water, which is seldom if ever below 50, evidently affects the strength and activity of these fish, whilst the rainbow trout coming as he does from the warmer waters of California, shows in marked contrast remarkable power, activity and gameness when hooked. Much has been written in English Sporting papers of the "Vanishing Rainbow" and in Ceylon the tendency of these fish to drop down stream has been the subject of much discussion. The general impression here appears to be that in mountain streams the presence of big water-falls, acts in a great measure as a bar to this tendency. The larger fish find a congenial sanctuary in the large deep pools, where food is more plentiful and solitude and shelter more attain-

able than in the shallow runs and reaches. In many of the best pools on the Horton Plains 2, 3 and 4 lbs. fish make their homes and of an evening when the rise is on, or when the May fly rise occurs, their presence is astonishingly conspicuous. The lakes in Nuwara Eliya too, contain many large fish, and here food being plentiful they find a sanctuary and of an evening may be seen at the mouth of the stream making their way up into the upper waters. That they will descend considerable falls is undoubted but so far a descent of from 15 to 20 feet seems to be all most of them care to attempt, and they appear to have an equal tendency to work up stream especially before they reach a pound in weight. Pools at the foot of inaccessible falls have been found teeming with young fish which have been bred in adjacent waters, and it is presumable that they have worked up stream till they could go no farther. Good fish too have been taken in considerable numbers in waters unstocked above small water-falls.

The Ceylon Fishing Club came into existence in January 1896, succeeding the original "Trout Fund Committee" and since that date excellent sport has been obtained in most of the streams on the upland plateaux adjacent to Nuwara Eliya. The Club has a lease from Government of all waters above 4,000 feet, at a rent of Rs. 100 per annum, and all sums collected by the Government Stamp Duty on licenses issued under ordinance No. 8 of 1893 are refunded to the Club. Membership involves an annual subscription of Rs. 10, and is obtained



without ballot but subject to the approval of the managing committee.

Licenses to members are issued at the following rates :—

The whole season, Rs. 50. To non-members, Rs. 120.

One month           " 30.   "   "   " 75.

One week           " 15.   "   "   " 25.

One day           " 5.   "   "   " 12-8.

All fish under 11 inches must be returned to the water, and a limit of 50 fish is placed upon each rod for the season. No fishing is allowed between 7 P.M. and 6 A.M. The use of live or dead natural bait, as well as all kind of artificial bait is prohibited in all waters except the Nuwara Eliya lakes, and no hook larger than No. 6 of the Redditch scale is allowed with the fly. The close season is fixed annually by the Ceylon Fishing Club and as the rainbow trout would appear to be breeding during nearly every month of the year, a definite period has not yet been decided upon. All tributaries of the larger streams are closed against fishing.

Also (and I am again indebted to Mr. Farr for most of the information that follows) there are Mahseer in Ceylon, but for some reason fishing for them seems to have been but little exploited. There would appear to be two or three species of the genus *Barbus*, in Ceylon streams, the "Leyla" of the Singhalese, being "*Barbus Tor.*" I should imagine that one of the others was *Barbus Carnaticus* or *Barbus Malabaricus*, but this is only a

surmise. Mahseer were also introduced into the island from India some years ago, to Nuwara Eliya and also into a stream in Maskeliya, and in both the above places are occasionally caught now-a-days up to 2 or 3 lbs. with fly.

I can hear of no tank-angling worthy of the name in Ceylon, but perhaps some kind reader would rectify this matter.

#### **TROUT IN KASHMIR.**

The following notes are all extracts from the reports on "Trout Culture in Kashmir" for 1900-1-2-3-4; for permission to reproduce which I am indebted to Mr. F. J. Mitchell the Honorary Secretary, who with the greatest courtesy and kindness has given me his reports as above, with full permission to take such cuttings therefrom as I may desire. The paras. that follow, are actual extracts from the reports themselves, the wording remaining practically unaltered, though some paragraphs have been omitted, and others slightly condensed.

##### **Report on Trout Culture for season 1900-01.**

Since the first report of the Kashmir Fishing Club last year, we have made a very great advance and have proved this year satisfactorily that trout ova can with care be safely imported and hatched and the young trout reared here.

We have also every reason to believe that they will breed as the extracts from letters from Col. Unwin and the late Capt. Kitcher of the 5th Goorkhas (Appendix B.) give evidence of the fact that 356 yearling trout turned down in the Kala Pani at Abbottabad in 1896 have

bred there. There is little doubt that the conditions for trout life here are more favourable in many respects than at Abbottabad.

This is a grand advance on experience in Ceylon and the Nilgherries where the winters have not been found sufficiently cold to enable the *Salmo Fario* to reproduce its kind.

Our object in future must be to get our trout to spawn under artificial conditions such as are adopted at all the best trout farms in England and Scotland, as otherwise the expense of getting out ova from home and the difficulty of procuring steamer carriage for it in sufficient quantity must make the stocking of the fine fishing waters of Kashmir a long and costly affair.

So far the expenses incurred have been small, but should we find that we can spawn trout successfully in the course of the next 2 or 3 years, hatcheries on a proper scale should be established so as to stock the Kashmir waters within a reasonable period of time.

The first lot of 10,000 ova kindly presented by the Duke of Bedford arrived by the *Caledonia* and reached Srinagar under the care of Mr. J. S. MacDonell on 19th December of 1900. They were at once transferred to the hatching boxes which were ready for them, all dead ova being rejected. The hatching was slow owing to the low temperature of the water, but by the 8th January all the alevins had hatched out. By the 7th February it was found necessary to commence feeding the young fish, and from that date to 21st March rapid progress was made.

On that and subsequent nights 6,000 healthy fry were successfully transferred to Panchgam where suitable water had been prepared for their reception.

A second lot of 10,000 ova, also presented by the Duke



of Bedford, arrived by the *Egypt* in March 1901, but apparently owing to its having been exposed to the air in Bombay for a short time, it was not in such good condition, and only 1,800 healthy fry were obtained from it, of these 1,000 were transferred successfully to Panchgam, and 800 were put into a fry tank at Dilawar Khan Bagh.

The difficulty of having to employ practically coolies to look after the young trout at Panchgam was considerable, but the funds would not admit of greater expense and cooly labour was necessary to regulate the water which at night came down from the snow melted at Nagbehrin during the day. There was a certain amount of friction with the smaller native officials at first and afterwards with the Zemindars whose requirements of water for irrigation had apparently expanded since the previous year. These difficulties were all arranged, but larger meshed nets had to be employed than were at first intended, and the consequence was that a considerable number of the young trout escaped into the open water, where, however, we hope they are thriving. Two were seen in a pool some distance above our upper screen as late as November and one of them was caught and brought back.

At both the hatching boxes and fry tank at Dilawar Khan Bagh considerable difficulty was experienced from the water being cut off for repairs to leakages of the main pipes. This we hope will be obviated later \*\*\*\*\*.

The fry tank proved most successful and would certainly encourage more extensive feeding of fry in the coming season. Out of 800 fry put in, 302 fine yearlings were in November successfully transferred to Panchgam, the largest being  $8\frac{1}{2}$  inches in length.

It is hoped that sanction will be given for two large

fry tanks at Panchgam for the coming season, as there can be little doubt that fish of 4 to 9 inches long have a much better chance of doing well, than fry of under 1 inch, and the season of the year (November) is also better to put them out, as the larger Kashmir fish are all in winter quarters then. The position at Panchgam seems also peculiarly favourable for establishment of artificial spawning beds.

.....Mr. Dane the new Resident came out and saw some of the trout at Panchgam on November 26th.

A grant of Rs. 2,500 was then made from State Funds, and arrangements were at once completed for getting out a new supply of ova. After consultation with Mr. Burt of the Surrey Trout Farm by letter, with the approval of the Resident, it was decided to order one case of 15,000 *Salmo Fario* ova and one case of 15,000 *Salmo Iridius* ova, and these are expected to arrive in Bombay by the P. and O. Steamer *Victoria* about 21st March.

The risk of carriage to the ova of rainbow trout is very much greater than to that of common trout, as they hatch so much more quickly, but the fish is so eminently suited to the lakes of Kashmir that it has been determined to take the extra risk to the extent of one case of the ova.

Should these hatch successfully, an application will be made to His Highness the Maharaja for the use of the Ahan water at Sumble, where the young trout would be transferred in the Autumn, should all go well. The consent of the P. and O. Coy. to carry our two cases of ova in the cool room of the *Victoria* was kindly obtained for us by the Duke of Bedford, to whom our heartiest thanks are due. Thanks are also due to Mr. Dhanjibhoy for the great help he has given us in the carriage of the ova,

The suggestion made by Mr. Dane on his visit to Panchgam that the length of the irrigation canal below the tanks should be given up is being carried out, and the small trout are being captured and carried up into the tanks as rapidly as possible, but they are exceedingly difficult to find.

One day after the man in charge had declared that there were only 3 left, the Honorary Secretary turned out some 40 or 50 from one corner, and of these 11 were caught in the course of an hour. The new Kashmir Fishing Laws have now been published, and give sufficient protection to the English trout for the present under rule 15.

The netting in the Tehlbul river, it is to be hoped will also be stopped under these rules as the trout are certain to find their way to the Dal-lake when they grow bigger.

#### APPENDIX B.

##### **Copy of a letter from United Service Club, Simla. dated 28th August, 1901, to Mr. F. J. Mitchell.**

I was talking to Barlow, 5th Goorkhas, about the Abbottabad trout yesterday. They were first put as fry into a tank at Tharmtant near Abbottabad, a very suitable place, in 95, and when big enough turned out in the Kala Pani stream which runs through two of the higher ranges and has a fairly cool climate in summer. Here they have since been caught up to  $1\frac{1}{2}$  lbs. weight, which seems to me small considering they have been in the stream for 5 years.

Possibly deficient suitable food may account for this. Their having bred however since first turned out, seems to be satisfactorily proved by the capture in the Kala Pani stream of late, of fry smaller than the original ones



were when first put into the stream. This seems fairly conclusive, and I think we may regard it as very encouraging for our experiment.

The Kala Pani is a fresh little river of about the same volume as, or less than, the river at Panjigam, and its elevation would be from about 5,500 in the highest part to 3,500 to 4,000 feet in the lower.

**Copy of a letter from S. D. Kitcher, Parachenar,  
Kurram, dated 30th June, 1900.**

At the beginning of this month I was at Abbottabad, and, while I was there, nine fish were seen in part of our water, of which five were caught and put back again. The biggest was 14 inches long and must have weighed about  $1\frac{1}{2}$  lbs. These fish have bred (for two last years, I think). I mention this as I have no doubt it will interest you.

**APPENDIX C.**

10,000 ova Ex. "Calidonia."

Put in Hatchery boxes good ova ... 7,288.

Took out white ova and dead alevins  
as follows:—

|                        |              |     |             |
|------------------------|--------------|-----|-------------|
| 13th January inclusive | ...          | ... | 750         |
| 19th   "       "       | alevins only | ... | 133         |
| 26th   "       "       | "            | ... | 155         |
| 2nd February           | "            | ... | 136         |
| 9th   "       "        | "            | ... | 66          |
| 16th   "       "       | "            | ... | 36          |
| 23rd   "       "       | "            | ... | 23          |
| 2nd March              | "            | ... | 10          |
| 9th   "       "        | "            | ... | 12          |
| 16th   "       "       | "            | ... | 9           |
| 23rd   "       "       | "            | ... | 32          |
| 26th   "       "       | "            | ... | 6           |
|                        |              |     | <hr/> 1,368 |
| Total fry ...          |              |     | 5,920       |

*Water temperature.*

|              |     |     |     |
|--------------|-----|-----|-----|
| January 25th | ... | ... | 36° |
| January 29th | ... | ... | 38° |

## 10,000 ova Ex. "Egypt."

|                                             |       |
|---------------------------------------------|-------|
| Put in Hatchery boxes good and doubtful ova | 5,246 |
| Took out bad ova to 6th April inclusive ... | 674   |
| 13th April inclusive ova ...                | 1,119 |
| " " " alevins ...                           | 88    |
| 20th " " ova ...                            | 389   |
| " " " alevins ...                           | 570   |
| 27th April inclusive ...                    | 371   |
| 4th May alevins ...                         | 147   |
| 11th May... ...                             | 49    |
| 18th                                        | 41    |
| —                                           | 3,448 |

Total fry ... 1,798

Feeding commenced 30th April.

*Temperature of Water.*

|           |     |     |     |
|-----------|-----|-----|-----|
| 7th April | ... | ... | 46° |
| 11th "    | ... | ... | 46° |
| 19th "    | ... | ... | 47° |
| 22nd "    | ... | ... | 46° |
| 24th "    | ... | ... | 47° |
| 28th "    | ... | ... | 47° |
| 2nd May   | ... | ... | 48° |

**Report on Trout Culture in Kashmir for 1902-3-4.**

As no report has been issued since the end of 1901, it is necessary to take up the history of what has been done from that time. Trout only reach their best stage for reproduction at three years old and as the earlier efforts

of those under observation were frustrated by unavoidable causes afterwards explained, there was little till now to report to the State or to the gentlemen who so kindly came forward with subscriptions towards the scheme for establishing the good old burn trout in Kashmir. After repeated failures to induce trout to breed in Ceylon and the Nilgherries there were few who believed in the possibility of his being established in the Shiney East and it must be very satisfactory to those who did believe and backed their opinion to know that the scheme now promises to be a complete success. There are no signs that the yearlings bred from trout reared in this country are in any way inferior in stamina to those hatched from imported ova; and that being so there seems no reason to fear that they will disappoint the hopes now formed that they will continue to reproduce their species. The *Salmo Fario* has come to stay.

In carrying out the Resident's suggestion of removing trout from the irrigation canal in the spring of 1902 altogether 688 fine young yearlings were captured and put into the ponds. It was found that they had spread themselves over a length of some 3 miles of the canal and that many must have gone down into the Reservoir.

On 27th March the consignment of ova Ex. "Victoria" SS. arrived in Srinagar and was at once transferred to the hatching boxes. Some of the Rainbow ova looked all right on arrival, but very quickly turned white in the water. None hatched out. It seems evident that this ova is too delicate to stand the sea voyage plus the long railway and tonga journey. *S. Iridius* must await his introduction into Kashmir till ova can be obtained from fish acclimated in India, or till we have a railway into Kashmir. As he appears to be succeeding in Ceylon and the Nilgherries, this time may not be so far off. He



would be an ideal fish for Autumn sport in the larger lakes. The box of Fario ova which came at the same time gave very satisfactory results; 8,003 healthy fry being transferred to fry ponds by 18th April. Misfortune however came in May when a cloud burst flooded the lower pond containing 4,000 fry, and nearly all were carried into the stream. No doubt many of them lived and found their way into waters that suited them.

In the late Autumn of 1902 a nice lot of about 150 well grown yearlings was put into the Liddar near Kotsoo. None of these have been since heard of unless indeed the trout reported to be caught in the Bringh this Summer by Mr. Pike was one of them.

Another small lot of 30 were released in Ahan water at Sumbal.

These last were all that remained of 1,200 fry put into the fry pond at Delawar Khan Bagh, many pipe bursts in July and August of that year having proved most unhealthy.

Of the rest some 600 were released in various parts of the Dachigam stream. In May, 1903, 111 selected fish were put into the stock ponds and 185 medium sized into the lower fry ponds. Only 200 very small ones were left in the spring-fed tank and of these there remained 122 on 26th August of this year which were taken out and removed to the lowest of the new ponds at Harwan. In the even temperature of the spring-fed pond these fish did not develop their ovaries and it remains to be seen if they will do so now in the varying temperature of their new quarters. In Autumn of 1902 it was estimated that there were about 1,000 trout in the large pond at Panchgam. They were fairly tame and showed in great numbers at feeding time. As the spawning season approached they seemed to be pairing.

Artificial spawning beds on the Ainsworth principle were put down, from which it was hoped that fertile ova might be collected. Arrangements were also made for trapping ripe gravid fish with a view to dry impregnation. These plans, however, ultimately came to nothing. During the absence of the Honorary Secretary at Kotsoo, otters of which till then there had been neither report nor indication found their way to the trout ponds. The native in charge not understanding the signs did nothing until the Honorary Secretary returned, with the result that the trout were thoroughly frightened, pairs were broken up and no doubt many trout were eaten by the otters.

Ultimately a little ova was collected from the artificial spawning beds but none of it proved fertile. On the Honorary Secretary's return, traps were procured and set in likely positions. In December and January eight bitch otters were secured, and two other otters broke away from the traps. In one case the trap being broken. In March a dog otter was caught in two traps, after which no more were seen and all signs of their presence disappeared.

During 1903 and this year reports more or less authentic have been made of trout being caught in different parts of the valley by natives, but in most cases it has been impossible to obtain actual proof of the fact. The fish have however in some cases been so accurately described by fishermen who did not know the law on the subject as to leave no room for doubt.

One report of this kind came from as far down river as Ningel below the Woolar lake. Two cases have been reported by eye witnesses who knew trout well and could have made no mistake. In the one case an English Colonel actually saw the trout caught in a net at the Dal-gate, but not knowing the law took no steps in the

matter. In the other case a watcher tried to seize a trout he saw caught near Telbul, but was beaten off by the fishermen whose names he was unable to get as they left at once. A trout of about 1 lb. weight was hooked and pulled out of the water by a gentleman fishing at the Dal-gatè this Spring, but it dropped off the hook at the edge of the boat. Another trout of about  $\frac{1}{2}$  lb. was actually caught in the Bringh above Bijbehara as already stated.

The sizes of trout caught have been most irregular. As early as May 1903, a trout of 2 lb. 14 oz. was taken out of the Harwan Reservoir in a dying condition. From bruises on the head and pectoral fin it seemed probable that a native had thrown a stone at it when crossing the sill of the by-wash.

It was in most perfect condition and the flesh was as red as that of a salmon.

No ova was imported in 1903, as it was believed that the fish in the large ponds at Panchgam would probably supply that was required that Autumn. This hope was rudely upset by the floods which took place in July. The water came down the Dachigam valley like a wall, sweeping the ponds practically out of existence. The Reservoir embankment at Harwan would probably have burst had not the Malori river saved the situation by wrecking the by-wash and giving the flood water an exit. Such a flood was real joy to the trout, and they took full advantage of it to settle into quarters that suited them. Many went down with it to the Dal-lake, and beyond in some cases, but very many also ran up the rivers or settled into the new pools formed near the site of their old ponds. All through the Winter following, numbers were seen lying about in pools in the Dachigam Nulla, but wet weather continuing till late in the Autumn



no fish could be taken out and examined till the spawning season was practically over.

At the earliest opportunity 22 trout were taken out one day, and were all found to be spent fish. The natural spawning conditions were as good as could be looked for in Kashmir. The late floods had thoroughly cleaned the redds and had also allowed fish to find their way easily to suitable spawning grounds. It has only recently been possible to ascertain anything of the result of the spawning which took place, and it appears to have been most satisfactory.

Early in September one of the small irrigation canals leading from the sluice of the Harwan Reservoir was closed, and Pundit Sodama being very much on the spot, did not miss the opportunity to explore it, with the result that he collected 32 fine little yearlings of  $2\frac{1}{2}$  to 4 inches in length. Five of them were dead, but the rest were put among the yearlings in the new ponds. On the 26th September one of the branches of the Dachigam stream had to be closed preparatory to work on a new Regulator for the Reservoir and 56 yearlings were taken out of the drying bed and put back into another channel of the same river. These were much better grown than the ones found below the reservoir. They ranged from 4 to  $6\frac{1}{2}$  inches in length and were fine healthy little fish.

The difference in size between the yearlings found in the two places is easily accounted for by the superior feeding in the river. The irrigation canal being generally dry in Winter contains very little natural food.

Further explorations disclosed the fact that trout yearlings were thinly scattered through practically every streamlet in the lower portion of the Dachigam Nulla and also in the irrigation canals below it. By the advice of a

Mr. Werry of  
New Zealand.

gentleman who introduced trout into one of our largest colonies, steps will be taken to secure some of those and carry them up to the head waters of the stream where they will be both safer and more useful.

The conditions for the new spawning season do not promise to be quite so favourable as last year. The water in the stream is already very low and fish not now in the neighbourhood of good gravelly runs may have difficulty in getting to these. On the other hand, the spawning trout are more mature and fish for fish should deposit more ova than last year. The pools where trout are known to be will be watched and, if possible, some of the spawners will be trapped when ripe. If fertile ova can be obtained it will be safer in hatching boxes than exposed to its many enemies in the open stream. Trout however are nearly as cunning as birds about their nests and with a small stock scattered over such an extent of water the task may prove more difficult than would appear.

The first essential to starting a hatchery on a scale suitable to stocking other streams in Kashmir is to have stock ponds from which the spawning fish can be taken and stripped as they are found to be ripe. Now that it has been clearly proved that trout can and will breed freely in Kashmir, it is to be hoped that His Highness the Maharajah in Council may see his way to providing funds for this purpose and ultimately to building and equipping a proper hatchery.

Three ponds were constructed this spring with funds supplied by the State at a cost of Rs. 604-1-0.

Three more ponds of the same size would probably be sufficient to allow of trout being properly sized and arranged. The present hatching arrangements would probably suffice for the first year after which the extension required could be better gauged.

In the autumn of 1903 under arrangements made by the Resident with the State Council a sum of money was provided to import 30,000 more Fario ova and an indent for that quantity was at once sent to the Surrey Trout Farm. The good services of His Grace the Duke of Bedford were again solicited and by his kind intermediation the P. & O. S. N. Co. were induced to carry this ova by their steamer "Macedonia" which arrived in Bombay on the 5th March of the present year. The ova was taken delivery of in time to catch the afternoon mail train of that day and arrived safely in Srinagar on 9th March. The hatching out was very irregular, one box of ova yielding little more than half what the other did, a result somewhat difficult to account for. There was some little delay in getting the new fry ponds ready, but on the 9th, 10th, and 11th May about 8,000 healthy fry were transferred to these and were safely placed in the upper pond. Almost immediately there were signs that the puddling between the ponds had not been properly done and by the third day fry began to appear in the third pond, having worked their way twice through six feet of dry masonry. A trap was immediately arranged below the third pond and some 150 fry were taken in it in the course of the next few days. Meantime the masonry ducts between the ponds were taken up and clay rammed in till all leakage was stopped. The fry were then netted out of the third pond and did not find their way back again. The fry have been twice sorted in the two upper ponds; the larger ones being put in the lower pond and the smaller in the upper one. They seem to be thriving well.

This autumn or early next spring some of the biggest fish might be turned out in any new stream, it may be thought desirable to stock and reserve for fishing later on.



Early in 1903 at the suggestion of His Highness the Maharajah, a site for trout ponds was selected in the Sind, near Maingaum and approved by His Highness in Council. The floods of July in that year proved however that this site was liable to be flooded and it had to be abandoned. Early in the present year a site was selected below Harwan, and sanction having been obtained three new ponds were excavated and lined with stone masonry. The supply of water to these being partly from springs and partly from canal is not liable to be cut off, and no difficulty has so far been experienced. The plot of land allotted has been fenced against vermin, and a hut has been erected for the Pundit in charge at a moderate cost. Arrangements are also being made for the spawning in the lowest pond of any trout that may prove gravid. Hatching arrangements are at present sufficient for any quantity of ova likely to be collected this year.

OVA Ex. "VICTORIA" SS. SALMO IRIDIUS OVA  
NONE HATCHED.

S. Fario—From wild trout and from hand-fed trout arrived Srinagar 27th March.

Put into hatchery boxes, hand-fed.

|                                    |      |         |      |      |        |
|------------------------------------|------|---------|------|------|--------|
| Trout ova                          | .... | ....    | .... | .... | 10,204 |
| Bad ova taken out up to 12th April |      |         |      |      | 2,960  |
| 17th                               | "    | alevins |      |      | 704    |
| 21st                               | "    | "       |      |      | 487    |
| 28th                               | "    | "       |      |      | 421    |
| 5th May                            | "    |         |      |      | 159    |
| 12th                               | "    | "       |      |      | 63     |
| 26th                               | "    | "       |      |      | 95     |
|                                    |      |         |      | —    | 4,889  |
|                                    |      |         |      | —    | 5,315  |

Put into hatchery boxes, wild.

Trout ova .... 4,205

Bad ova taken out up to 12th April 1,234

17th „ alevins 119

21st „ „ 29

28th „ „ 73

3rd May „ 45

12th „ „ 4

26th „ „ 12

— 1,516

2,689

Total healthy fry turned out .... 8,004

Commenced feeding alevins 25th April

Water Temperature

25th April .... 47°

19th May .... 50°

OVA Ex. "MACEDONIA" SS.

Box No 1. 15,000 S. Fario ova.

Ova put into Hatchery boxes .... 9,971

Bad ova and dead alevins taken out up to

20th March 1,977

28th „ 1,179

4th April 875

11th „ 689

18th „ 280

25th „ 40

11th May 49

— 5,089

Healthy fry from Box No. 1 ... 4,882

Box No. 2. 15,000 S. Fario ova.

Ova put into hatchery boxes .... 6,356

Bad ova and dead alevins taken out up to

20th March 952

28th „ 1,036

4th April 567

11th „ 426

18th „ 212

25th „ 27

11th May 24

3,244

Healthy fry from Box No. 2 ... 3,112

Grand total turned out ... 7,994

\* \* \* \* \*

#### FISHING ON THE NILGIRIS.

Being up at Ootacamund as I write this; I have been enabled, by the courtesy of those concerned, to have access to the "Annual Reports of the Nilgiri Game Association" for the last 12 years or so,

As the paras. of the reports, which relate to "Fish, imported and indigenous" are too long to reproduce *in extenso*, I have gone carefully through the different reports and have endeavoured to make such extracts as will enable those who may be interested in the Blue Mountains, to gather some idea of what has been done in the past, to stock with fish the streams and lakes of these beautiful hills.

"1892. TROUT.—Of the trout fry turned out into the



various rivers and ponds, those which were kept by Dr. Ross in his small reservoir at Doddabetta were almost all lost by the breaching of the dam during the heavy rains of October last.

This was most unfortunate as the larger and older fish were full of ova and ready to breed. One trout was seen by Mr. Jamieson in the Emerald Valley stream. The Forest Guard at Pykara reports that he saw several large fish below the bungalow, but whether these were trout or Carnatic carp introduced years ago, it is impossible to say.

It has been proposed and the proposal has been sanctioned by the Committee to import more trout and perch ova next December.

*Carnatic carp, Tench, Mahseer, etc.*—The Carnatic carp take kindly to the Hill waters, and those introduced into the lake and Marlimund reservoir have grown to a fair size; but they will not breed as the water is too cold to hatch the ova.

Tench and carp breed rapidly and grow to a fair size; but the continual netting and poaching that goes on at night in the Lake and Marlimund reservoir is very detrimental to sport. The banks of the Marlimund reservoir are covered by weeds dragged out by the roots, fish scales and dead fish that have been dropped in the dark. This may be seen at any time and shows the extent to which poaching is carried on. Three persons were caught fishing by night in the Marlimund reservoir by the Caretaker of the lake, and were convicted and fined Rs. 6, 4, and 3 each, but such punishments are of little avail to stop poaching."

"1893. TROUT.—The four large fish at Doddabetta were transferred to the Snowdon trout-ponds. The two females spawned in February, but as the males were in milt in November, the ova could not be fertilized,

40,000 ova were obtained from Mr. Silk (Marquis of Exeter's Manager). They were put into the ice-house, and were of course at once frozen to death. The money spent and trouble taken about the matter were wasted. A telegram was despatched to Mr. Silk to send out 20,000 more ova, and, instead of sending them at once on receipt of the telegram, Mr. Silk delayed a whole month and then sent out the ova. They arrived on the 4th of March, the hottest time of the year. The high temperature of the water destroyed the fry as fast as they were hatched out and only 83 of the strongest survived. These were put into the fry-pond at Snowdon and are now fine strong young fish 3 inches in length. Out of the fry 10 were retained in the large hatching box, of these 6 survived and are quite equal in size to the fry put out in the pond. All the fry have been daily fed with sheep's brains and chopped earth worms and young white ants.

Two stock ponds have been excavated in Marlimund plantation,..... and a site has been chosen on the banks of the Pykara river for a stock pond for breeding fish, where a natural depression in the soil has lent itself to the formation of an artificial dam.

Trout turned out into the Pykara and other rivers:—The Association is indebted to Mr. Marsh for the first successful attempt made to introduce trout ova and hatch them out on these hills. Encouraged by the success of Mr. Marsh's experiment, (which cost him some Rs. 200 and much personal trouble) the Association imported ova which Mr. Edmiston kindly took charge of on the way out and which proved a success. The fry were introduced into the Emerald Valley stream, the Pykara river, the Ootacamund lake, Doddabetta and Marlimund reservoirs and Dr. Ross's lake.

Mr. Wapshare also went to considerable private ex-

pense, amounting to several hundred rupees in importing ova, which he placed in the Pykara river. Mr. M. A. Lawson aided the Association with his personal assistance and a donation, and the Association is not a little indebted to him for the results attained. Trout have been seen in the Doddabetta reservoir, the Emerald Valley stream and the Pykara river, but unless the Association systematically hatches out ova and turns the fry into the streams and rivers, no real success can be hoped for, as all the ova are devoured by the legions of crabs infesting the rivers as soon as they are laid. Natural reproduction is not therefore to be expected, but the fish kept in the Association ponds must be annually stripped and the ova artificially hatched in boxes and the fry turned out. Three men have already been trained for the work. The trout ponds at Pykara will probably cost Rs. 1,200 when properly completed, but this will be very cheap when compared to the cost of similar work at home.

*Perch fry.*—Mr. Silk has kindly promised to present the Association with some perch fry, which Mr. H. P. Hodgson will probably bring out with him on his return shortly.

*Carnatic carp, Tench, Mahseer, etc.*—Though the Honorary Secretary proposed that some attention should be devoted to the introduction of valuable indigenous fish, more especially Mahseer, the Committee did not sanction his proposals. There is no doubt however that some of the reservoirs might be stocked with *Barilius Bola* (the Indian trout), *Barilius Bakeri*, striped mountain carp, Mahseer, Rosy perch, Labeos, Rohus, etc., instead of being as they are now full of the worthless golden carp, which afford no sport and are worthless for food on account of their numberless bones. The Honorary Secretary (at his own expense) introduced during the year, 28 Mahseer,



2 mountain carp, 1 Labeo, 24 Carnatic carp, and 16 common barilius. All these fish are doing well and promise to succeed, the Barilius which were only caught last year have already increased to about 2 or 3,000 and the fry are nearly full grown. Some mountain carp were obtained from the Kollimalais by the Honorary Secretary in 1872, and successfully brought up to the hills, but an otter managed to get into the pond where they were kept and destroyed them all. These and other experiments connected with pisciculture, cost the Honorary Secretary nearly Rs. 900, and Mr. Wapshare and other gentlemen have also spent money freely on similar experiments, which on the whole have been sufficiently encouraging to warrant further perseverance.

*Enemies of fish.*—Horned owls, water snakes, crabs, otters, the larvae of the dragon-fly and Mildew (*Suppiligneus ferox*) are the most deadly enemies to fish on these hills. The owls hook the fish out with their talons when they come into shallow water at night and are exceedingly destructive. The Honorary Secretary trapped several owls that had become confirmed depredators, with gins. No doubt the two male trout which died, were injured by owls seizing them. Water snakes are fortunately not found above 6,000 feet, but they swarm at lower elevations and it is impossible to keep fish in any small pond, if they once obtain entrance.

Twenty-eight Black spots, which the Honorary Secretary brought all the way from Tellicherry were eaten in a week by 5 snakes, all of which were shot as they appeared. Each snake had 2 or 3 fish in it. They do not hesitate to attack and even kill fish of half a lb. in weight.

Otters kill large quantities of Crabs, and Dragon-fly, larvae, but very seldom kill fish unless they find them in a confined pond. Crabs and Dragon-fly larvae are so

destructive to fish ova, that it is hopeless to expect trout to increase where these pests are abundant.

.....Messrs. Crossley and MacTaggart on the Pulneys, have collected Rs. 700 already, and are making active preparations to introduce trout into the pretty lake at Kodikanal, in which spirited endeavour all must heartily wish them success."

"1894.—On the 21st May 1894, 390 strong trout fry were put into the upper pond, and 78 into the small stock pond in Maliamund Plantation. The largest of these fry (which was captured) in the supply stream in Snowdon was 4 inches in length. These fry consisted of *S. Fario*, *S. Levenensis*, and *S. Fontinalis*, but how many of each kind it is impossible to say, as they escaped when very small through the meshes of the perforated zinc into the hatching boxes below, and thus got mixed up, but the bulk of them are doubtless salmon trout.

The Association has now 4 large stock ponds capable of holding more than 1,000 breeding trout, and eight fry ponds capable of turning out 6,500 yearlings.

No trout have been seen in the Pykara as yet, but this is not surprising if the fish have not bred.

Mr. Silk has promised the Association 20,000 ova next November, to make up for the losses suffered this year, and it has been arranged to get out four different species of trout in order to insure success.

If *S. Levenensis* will not breed, no doubt some of the American trout will, and the most promising of these are the Rainbow trout and the American Brook trout."

*Perch fry*.—The perch fry sent out by Mr. Silk in the care of Mr. Hall all died unfortunately.

*Carnatic carp, Mahseer, Tench, etc.*—The common

Barilius introduced by the Honorary Secretary into a private tank have been a complete success. Two fish only 2 years old were weighed and found to be  $2\frac{1}{4}$  and  $2\frac{1}{2}$  oz. respectively though rarely found to exceed an oz. in weight in the plains. Snakes were found to be terribly destructive. Some 200 have been shot, and nearly every snake contained 2 or 3 fry. Several mountain carp were obtained from the Wynaad and turned out, but have not been seen since.

The Honorary Secretary also introduced 103 Barilius into the Billikal lake, 56 into the Marliamund reservoir, 50 into the Snowdon reservoir and 4 were taken to Pykara and placed in fry pond No. 6. Some Hope river carp (33) were also introduced into the private pond referred to.

.....*Kodaikanal*.—The Palni Association imported two lots of ova, but met with very poor success owing principally to their water-supply having run short, which caused the death of most of the fry. The small number saved were turned into a small pond.

*Appendix D*.—Instructions were sent to Mr. Silk to dispatch 3 consignments of trout ova of 20,000 each in December and January. On 6th December the first consignment arrived by S.S. *Manora*, and consisted of 40,000 ova, of which 20,000 were Rainbow trout and 20,000 (apparently) Loch Leven. ....The ova were found to be in very bad condition on arrival at Ootacamund.....with great trouble the good ova of which there appeared to be about 10,000 were carefully cleaned and separated. A few days subsequently there was a sudden change in the weather. Heavy clouds banked up and some rain fell, and the temperature of the water rose from  $53^{\circ}$  to  $61^{\circ}$ . There was immediately serious loss



in the Loch Leven ova. On 20th December the smaller ova (Rainbow trout) began to hatch out, and by the end of the month the whole of the ova had hatched. Some 6,000 fry in all were obtained, of which only 572 were Loch Levens.

The fry thrive fairly well, as the weather again became frosty till the 12th January, when the weather again became cloudy and showery, and the temperature of the water rose. This occasioned considerable mortality, from 20 to 50 fry dying daily. There was an improvement again on the 15th when the temperature of the water fell to 53°. The remaining fry about 5,000 in number are in very good order, and have commenced to feed on sheep's brains, etc.

On the 14th January 1894 the "Golconda" arrived with 20,000 *Salmo Fario* ova. .... About 12,000 ova appeared to be in good order. ....

The young fry of last year which are now some 6" in length will be transferred to the stock pond in a week.

The consignment of ova for the Pulneys which arrived in December proved a total failure, the second consignment just received by the Golconda may turn out more successful, at least it is to be hoped they will.

.....Seven fry ponds have been constructed this year. The following is a description of the ponds.

(Here I omit description of 6 ponds, giving that of No. 3 as typical of most of the others.)

.....*Fry pond No. 3.*—I took advantage of a small shola to construct a capital fry pond touching it, so as to obtain the advantage of the natural shade. The pond is roughly shaped like a turnip, the tail running up into the shola. It is 12' deep at the dam and 4' at the upper

end, water lily seed and water cress have been sown in it, and the dam is fringed with Royal fern and Calla lilies. On the 26th January, 1894 I stocked it with 403° Fontinalis fry raised from the 1st batch of 4,000 ova received. It was also stocked with 254 Gammari and 36 sand-fish on the 1st February 1894.

*S. Fario fry.*—The few fry that were hatched out are still in the hatching boxes. There were only about 500 secured out of the last lot of 20,000, due to the ova not being eyed when dispatched. They took 28 days to hatch out. ....The eyed *S. Fontialis* ova seem much harder. ....this species (The American brook trout) is evidently much harder than the other two species.

*Stock ponds.*—The fry pond was emptied, and 30 yearlings obtained some of these being double the size of others. This is only 40 % of the fry put in. Sir James Maitland reckons on 50 % of strong fry growing into yearlings, and accounts for the loss as due to some of the fry outstripping others in growth and then devouring them. It is difficult to prevent such loss.

An attempt was made to find the trout put into the Marlumund and South Supply Reservoirs. I accordingly sent for Kutti with his boat and nets. Both casting and drag nets were thoroughly tried in Marlumund, with the result that a number of undersized carp and tench, and some murrel were found, but no trout. The South Supply Reservoir was next tried. There the water being very clear, and no other fish but trout having been introduced, there was no difficulty. The trout could be seen feeding, and 5 were secured without much difficulty with the drag net, and conveyed to the stock pond into which they were put. These fish were all males but one. ....No ova were laid. ....

Mr. Silk has generously promised to present the Asso-

ciation with 20,000 rainbow trout ova next November as some compensation for the loss we have suffered this year.

1895.—From MAJOR C. J. GRANT, v.c.

TO HONORARY SECRETARY.

.....Last year 41,000 ova were ordered from Mr. Silk of Burghley Park fishery, they were shipped on board the B.I.S.N. *Manora* which arrived Madras 14th December. ....This consignment unfortunately was a complete failure.....

*Yearlings.*—In February 1894, 78 fry were put into the small fry pond in Snowdon Shola, 300 fry were put into the upper pond below Snowdon, 527 fry were put into two of the fry ponds of Pykara, and 1394 fry were turned into the Pykara river near the Bungalow. In the spring this year we drained all the fry ponds and found 40 in the Shola pond, 120 to 130 in the upper Snowdon ponds, and 7 in the two Pykara ponds. About 20 to 24 were taken out of the Snowdon ponds with the fly. These were all disposed of as follows:—Seven into the Pykara river, 120 odd into the head waters of the Avalanche river, and 46 into Burnfoot lake. Thirteen were killed in transit.

*Seven-year olds.*—In 1888 some thousand fry were put into the Pykara river, 80 into the Dodabetta reservoir and some 300 into the head waters of the Khundah river. Last spring we netted the Dobabetta reservoir and took out 16 splendid trout from  $1\frac{3}{4}$  to 7 lbs. in weight. One was killed by the net, she weighed 2 lbs. and was full of ova, she has been preserved in spirits. The remainder were turned into Burnfoot lake. There are about 60 fine trout now in this lake, and I think that they will come up the stream to breed, they can then be netted out and stripped.



### III

*Khundah river.*—The trout placed in the Khundah river in 1888 have bred. In May I searched from the source of the river at Kingodar. ....In all the small pools trout were darting about. The water was so clear that it was almost impossible to get a fly over them, but when it was almost dark I got two. They rose freely and fought well for their 3 or 4 oz. weight. I put them back unhurt. ....Fishing lower down a heavy fish broke me, and I landed one over a pound, a female full of almost ripe ova.

*Pykara river.*—I am sorry to say that no signs of fish have been seen in this river. ....The mountain carp in it are doing very well indeed and give good sport with the fly....."

"1896.—On the 30th November 1895, the Howie Town Fishery Coy. shipped 60,000 odd trout ova on board the *Clan Grant*, at Birkenhead for Madras. The ova were stripped on the 24th, 30th and 31st October from 5, 6 and 7-year old trout, 20,000 Levens and 40,000 Fario. ....

The box of *Levenensis* ova—spawned on 24th October was first opened; these ova were in splendid condition. ....

The two other boxes each containing 20,000 odd Fario were then opened and also were found in almost perfect condition. ....In the beginning of February a few hundred fry were turned down in the different streams near Ooty, and on the 10th 14,000 were taken out by night to the head waters of the Khundah and Kroormund rivers. I wrote home last year for the latest pattern of fry carrier, but was told on the best authority that the best thing was a chatty. So the fry were carried out in 12 chatties slung in pairs on sticks (this to prevent the heat of the men's heads hurting the ova) and in 4-tin bait cans. Chatties are very bad fry carriers and nearly 2,000

fry died in them, while hardly any died in the bait cans.....

On the 14th the remaining fry, about 5,000, were taken by night in bait cans and a foot bath, with hardly any loss at all, to the head waters of the Avalanche river...

A few hundred were also taken by Mr. Edmiston and Mr. Turpin to the Kotagiri side of the plateau. A few hundred were put into the shaded stream which flows into the Burnfoot lake....."

"1897.—On 24th March there were over 13,000 fry in the boxes which it was intended to distribute (in bait cans or zinc tubs, not chatties), but owing to an unfortunate accident a large number were killed and only 3,000 remained. Of the 3,000 fry surviving, the following distribution was effected.

- (1) *Billihalla Khundahs*.—500.
- (2) *Sigur Tributary*.—Capt. Beadnell, 300. Most of which were killed by the carelessness of men who took them out.
- (3) *Burnfoot lake*.—600, all put out in good health.
- (4) *Fairlawn's stream*.—500, ditto.
- (5) *Lovedale stream*.—500, ditto.

.....With the approval of the Committee there were ordered from the Director, German State Fish Farm, Huningen, a consignment of 20,000 Rainbow trout; ..... owing to misunderstandings the ova were not despatched this season.

.....Major Grant tried to net, in February last, some 3-year old trout for spawn, but failed. He saw over 30 country-bred 3-year olds in the Khundah river.

They were very heathly and smart and have any extent of good natural redds near by. He also saw 6 imported 3-year olds in the Avalanche river; one a Leven over 4 lbs., and he is not the biggest fish in the river.

Major Grant considers that fishing in the Khundah river from the Avalanche bridge downwards should be opened for the following reasons. The country-bred fish are nearly all above the bridge. The imported trout were turned down in 1888 and he does not think that they have bred since the winter of 1893-94, and are better out.

In order that no country-bred fish should be taken, Major Grant would impose a limit of 3 lbs. under which all fish should be returned to the water. ....Licenses should be issued,.....and sportsmen should only fish with the fly and use a landing net....."

"1898.—The Report of this year is practically a blank as regards fishing."

"1899.—In Major Grant who has left the District, the Association has lost an enthusiastic fisherman, and one to whose labours the present measure of success is largely due.....It is satisfactory to report that a successor in every way worthy has been found in Major T. N. Bagnall....."

The following are his notes for the season....."

"I regret to say that the whole of the *Salmo Iridentis* ova received this year was worthless..... It was clearly the fault of the people on boardship.....Herr Taffe of Germany has behaved very well in the matter; he has expressed his regret and has promised a fresh consignment to arrive next March free of charge.

I have tried my best to find out all I could about the existence and habits of the trout here.....Burnfoot lake unquestionably contains trout.....They are probably in the other lakes, but trout in lakes containing the large amount of food that the lakes do here, seldom come to the top and rarely if ever take a fly.

*Avalanche river*.—The watchers reported to me in



April that they had seen a large trout killed by an otter .....I have fished this river several times but saw no fry.

*Emerald Valley river.*—On the 23rd June, I caught a Fario (male) weighing 4 lbs., he fought well and was in good condition. I was broken by a large fish the same day.

Early in July Mr. Wapshare caught a female fish weighing  $2\frac{1}{2}$  lbs., he was moreover broken by a large fish, and he saw 3 more feeding (one took a frog near the bank). On July 26th, I caught a fine fish of  $3\frac{1}{2}$  lbs., a female fish with developed ova. ....

*Pykara river.*—There is no certain evidence of trout having been seen here. ....The carp seem to be thriving well. Capt. Beadnell has had most success, he caught 15 lbs. weight of fish in 3 hours one day. ...."

1900.—*Trout culture.*—During the year under report, Major Bagnall the worthy successor of Major Grant has been in charge of everything connected with trout culture, and his assistance and advice in this good object have been as invaluable as ever. The information for the year falls naturally under 3 heads:—

- (a) Our attempts to procure ova from England;
- (b) The existence of trout on these hills; and
- (c) The existence of other fish in this district.

(a) Two consignments of ova were sent by Andrews and Andrews of the Surrey Trout Farm, the first consisting of S. Fario, by the *Golconda*, the second of the American rainbow trout or S. Irridens by the *Manora*. Every precaution was taken this side of Madras, but owing to the apathy and utter want of appreciation on the part of the individuals into whose custody they were delivered on boardship, both the consignments arrived in a hopeless condition.

.....The following notes for the season have been kindly furnished by Major Bagnall.

(b) The only trout I have seen caught during the year, were during our netting operations in Snowdon ponds.

Three were caught, unwholesome looking fish of about  $2\frac{3}{4}$  lbs. each.....I have heard of fish being caught in Burnfoot lake, and have seen the bones of one killed by an otter.

*The Pykara Stock pond*—Which should have contained 19 large trout was emptied after great labour. It contained no trout, but one small fish of the Mahseer species, the care-taker beyond remarking that he was a poor man, had no information to offer, but there seems room for further information.

*Emerald Valley River, Avalanche and Kundah rivers.*—I have frequently hunted all along these rivers, and have seen three large trout in the Emerald valley river, but no sign of fish life elsewhere. Nowhere have I seen a fish as long as a little finger, and I cannot find any watcher who has.

*Pykara river.*—I heard a friend say he rose a trout in the Pykara river, and I hope he was not mistaken, but those who have fished there will remember how red the Mahseer look in the water.....

Our present position seems to be.—That we know of the existence of trout in the Emerald valley river only, and in Snowdon ponds, in the Dodabetta reservoir, and in Burnfoot lake, they probably exist also in the Marlimumd reservoir.....

*Regarding other fish.*—There are swarms of fish of the Mahseer species in the Pykara river which afford excellent sport with the fly or "puchi." The largest I have heard of has been 4 lbs.....

Mr. Boesinger of Coonoor kindly sent me a photo of a

4-lb. fish which he had caught in the Wellington lake, and those who know unhesitatingly name it a Mahseer.

Heaps of English tench and carp are caught in the Ooty lake, and some Barilli, but I cannot get definite evidence of trout.

"1901.—Major Bagnall has little to note this year.

No ova were received.

I am aware of capture of one trout only, a female of 5½ lbs. in spawn.....existence of any small trout has not been reported.

Netting carp in the Pykara with a view to stocking other places was successfully carried out last May, and fish were put into the Chemmangooly stream, Krurmund river, Sandynulla stream and the Ootacamund lake.

It will be interesting if sportsmen will kindly report anything regarding fish they observe in these places in future."

"1902.—*Fish*.—Through the kind assistance of Mr. C.G. Douglas, the Association was able to secure a consignment of 6,000 fario ova and 4,000 Iridens in March last. It was received in good condition at Bombay, and Mr. Van Ingen the local taxidermist was deputed to bring it to Ootacamund.....The ova hatched fairly well. Owing to the muddy water supply to the hatchery the result was not so satisfactory as it otherwise would have been. By the settlement of silt on the ova many were spoiled. It was only owing to the extreme carefulness on the part of Major Bagnall that about 200 to 300 fry were saved. When sufficiently big these fry were put into the Pykara pond. Unfortunately the dam of the pond was breached by a big flood, and it is not known what became of the trout.

There is every evidence of trout in the Snowdon pond



and Emerald valley river. Major Bagnall himself caught a 7-lb. trout in the Emerald valley river, and the Honorary Secretary himself saw five trout in the same river, all large, weighing between 4 and 5 lbs. Capt. Wilson of the 44th Goorkha regiment, who is at Ooty on leave, and who is undoubtedly an expert on matters connected with fish, asserts that trout will breed when they are well acclimatised. He, when out at MacIvor's bund, noticed a fish of about  $\frac{1}{2}$  lb. in weight at the junction of Emerald valley and Avalanche rivers. As no other fish except trout were ever put into these rivers, we cannot but conclude that it was a small trout.

If this surmise is correct it follows that the trout are breeding.

"1903.—During the year under report, no ova was indented for, and hence there seems little to record that is of any special interest under this heading. No reports were received from anybody to the effect of having seen any trout in any of the waters, except that Mr. Van Ingen saw one in the Pykara, while fishing there in November last."

"1904.—*Fish*.—Two consignments of 10,000 each of rainbow trout ova, were imported during the year by the Association at a total cost of Rs. 1,621-6-5. The first consignment of 10,000 ova were hatching out when they arrived, and we only succeeded in getting 741 fry, which have however been successfully turned out in Parsons valley stream and are doing well. The second consignment was even worse than the first and we only got 124 fry out of it. These have also been turned out in the same stream. The fry have been seen from time to time and are thriving well.

The Committee have again resolved to import 20,000 more ova in the coming season, and Major Bagnall will

be asked to make the necessary arrangements to carry out the resolution."

"1905.—As regards this year the report is not yet out, but as far as I can ascertain there are no reports of trout caught or fry seen. Unfortunately in this year, Anno Domini 1905 the trout fishing on the Nilgiris may still be represented by the word *Nil*. However there is no lack of energy or enterprise up here, and it is to be hoped that the rainbow trout will really be a success now, and in another few years these hills with their lakes and rivers, and their innumerable small streams and burns (all within the easiest of distances from the centre of Ooty itself) should be a veritable fisherman's paradise.

As regards Carp fishing in the Pykara, one can get quite good sport, but reference this river see under the heading of Pykara in the chapter on localities."



## CHAPTER XII.

### FISHING IN ANDAMAN WATERS.

By Major W. MOLESWORTH, I.M.S.

THE Andaman seas are, to the keen fisherman, a perfect paradise. Any follower of the gentle craft may consider himself fortunate if his lot be cast for a longer or shorter time in these beautiful isles of exile. And before he leaves India let his stock of rods and tackle be replete, for many will be his "smash up" and loss of gear. The chief fishing grounds are to be found in the harbour of Port Blair itself, to the east of Ross Island in the open sea, and in any of the numerous bays or creeks which indent the coast of the Islands. If a small steamer or yacht be available, the fisherman who ventures still further a field is certain of heavy fish and large bags. As to fresh water fishing; there are a few tanks on the Islands, which have been artificially stocked with murrel, and one small stream which contains a fish of the herring tribe (*Megalops Cyprinoides*) in fairly large numbers. The fish are small, rarely over 8 oz. in weight, but at times they rise freely to any trout fly—especially a black spider—and they are excellent eating. However as the sea fishing is so good, this small stream is almost neglected of fishermen. Of the varieties of sea fish to be caught—their name is legion; so only a few of the chief kinds need



be mentioned, and those only which afford good sport. First and foremost as the sporting fish of the Andamans, stands the "Khokari." Scientifically he is known as "Caranx" and has innumerable relations of the same tribe. The fish is a handsome fellow something like a perch—full and deep-bodied—oblong and more or less compressed, scales small and resplendent, head small and shapely, high shoulders and a very powerful tail and fins. The pectoral fins are long and scythe shaped, and when the fish is newly come into the harbour from the open sea and is in good condition, the fins look as if they were of beaten gold. The colour of the body varies from a bluish silvery sheen on the back, to a golden white below. The largest run to 70 or 80 lbs.—and they can be caught weighing but a few ounces. These fish run in shoals of 20 or 30, and each shoal averages much about the same weight individually. The usual run of ordinary fish being from 15 to 25 lbs. They are excellent eating especially the smaller ones, and can be cooked in many ways. The larger ones are best when smoked like salmon. Their appearance in the harbour of Port Blair is regulated mainly by the appearance of the shoals of sardines, and these shoals they follow with persistence, so that no other bait is of much use at these times. The Khokari is a magnificent fighter and the first rush of a 30 lber. is not easily forgotten. If on the feed, he rushes madly at the baited sardine and takes him cross-wise, and, as a rule, is firmly hooked. The strike should not be made until a little line has run off, and then the fish must

be struck firmly and not too quickly. Beware of his rush and the line—see that the reel is in good working order, for if checked he will snap stout salmon line like thread—and look out for fingers, for if the line comes in contact, they will be cut and burnt to the bone in a second. His first run may be anything up to 60 or 70 yards, always away and downwards from the boat—and then after a couple more bolts he settles down to an absolutely dogged fight—and weight for weight no fish is more powerful. But fortune being against him, he is slowly reeled in and before long his silvery gleaming side will be seen glimmering in the blue water. As soon as he catches sight of his captor he will once again make a splendid and desperate rush for freedom—but without avail, and exhausted to the death, will be slowly reeled in to the gunwale, when the gaff, or better still the three-pronged fishing spear of the Nicobars ends his gallant life and lifts him into the boat, to be duly admired by a happy and exhausted sportsman. The winter time—so called—and the early hot weather are the best times—the heavy rains of the Andamans muddy the sea for miles—and render Khokari fishing useless. As to tackle—a very powerful rod is required—for boat work nothing is better than a 14 feet stout ringal mounted with snake rings; 200 yards of best Manchester cotton line—or native tussore silk—preserved salmon line rots quickly in the climate and is expensive. Steel wire traces with swivels, or double twisted salmon gut. Reel  $4\frac{1}{2}$ -inch brass—Luscombe or Manton of Allahabad and Calcutta can always

supply the necessary tackle—if applied to—with details. The best hooks are bronzed plated limerick 3/0 to 6/0. The best bait is of course the ordinary so called sardine. Quantities can usually be obtained in the early morning from the local convict fishermen for a few annas. These are captured in throw nets, and the fish must be immediately placed in a wicker basket and hung over the side of the boat in the water, for the livelier they are the more likely are they to attract the Khokari. Having rowed out about 100 yards or so from the shore, throw 3 or 4 of the sardines as far as possible from the boat into the sea, and if the fish are about, the sardines will be seen to make desperate attempts to escape in all directions—but a mighty swirl and they are no more. Select a lively bait and carefully insert the hook just behind the dorsal fin and above the spinal bone, taking care not to injure either the fish or its backbone in the handling. Swing out as far as possible letting the free line coiled up on the thwart or gunwale run out. As soon as the fish touches the water reel in any slack left, and let the fish swim about freely and as naturally as possible. It is sometimes useful to throw in a few more sardines beside the bait as an extra attraction. Another method is to hook the sardine through the lips, but this is not such a good way as Khokari invariably seize sideways. Trolling in a sailing boat is at times successful and here again the best bait is a sardine. Use an Archer's spinner, the triangles should be of extra stout make, as a Khokari can, as a rule, chew up the ordinary



tackle without much effort. Not more than 3 or 4 knots an hour is about the best trolling pace. They will also take a spoon bait, or even a bit of white rag tied to the hook and towed behind the boat. Ground fishing with pieces of dead fish, half-boiled potato or pieces of meat are in vogue with the native fishermen who often kill heavy fish in this way.

The fish next in order of sport in Andaman waters, is the seer or surmi (Cybium). This fish is long and narrow, something like a mackerel, and has a very formidable set of teeth. They follow the shoals of sardines along the coast, but are also frequently taken far out at sea, where they attain a large size—up to 60 lbs.—and run up to 5 or 6 feet in length. Closer in shore they are generally smaller, about 10 lbs. or so, and, of course, are much better eating than the coarser fleshed big fellows. As they are usually captured when trolling for Khokari, the same tackle answers, but owing to the somewhat savage armature in their mouths they frequently cut the trace—so a single steel wire trace is preferable for their capture. The hook should be a No. 8/0 limerick, and the sardine is best threaded on to the shank, the barb passing through the ventral orifice and the head of the hook can be lashed to the mouth of the sardine with a bit of thread; ordinary triangles they crush easily. When struck they go off with a terrific rush, mostly along the surface, and repeatedly leap high out of the water shaking their heads vigorously. Once firmly hooked they are seldom lost—as after the first brilliant rush they

have little staying power. Spoon baits, rag and rubber eels can also be used as for Khokari.

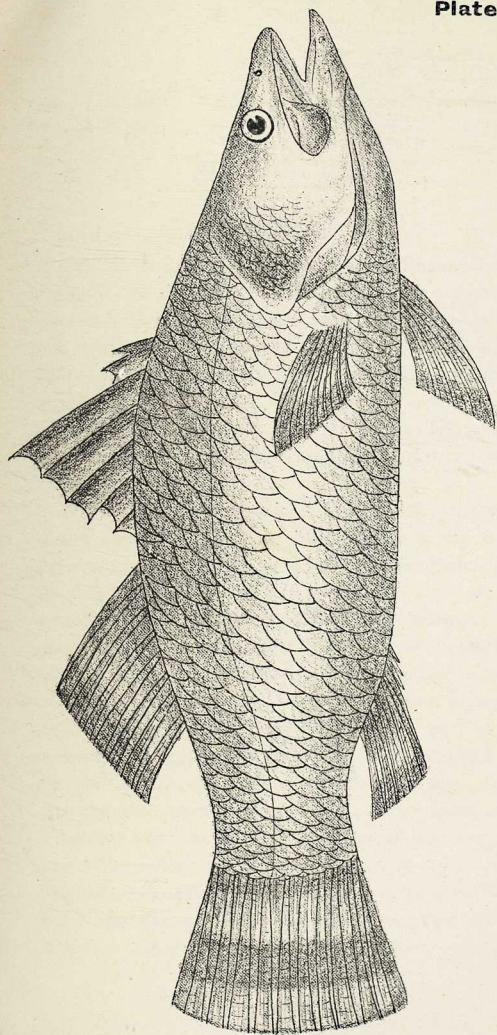
Other sporting fish found in Port Blair and captured as above are—Barracuda, Tunny, Bonito, Gar fish and Sharks.

Another form of fishing is that of ground fishing from the jetty or from the rocks of the various islands. The fishes caught are small Khokari, bream, gobra or rock cod and innumerable other varieties of parti-coloured fish generally of most gaudy raiment. The rod may be an ordinary ringal or an old trout rod, and the sport often whiles away a tropical evening. The best bait to use are prawns, of which great quantities can easily be obtained in the bazaar, limpets, soft shelled crabs or almost anything edible.

The wealth of marine life as viewed from Ross Island jetty is absolutely marvellous, and on a clear evening the waters below one's feet look like a well crammed aquarium—full of hungry fish often ready to seize the morsels lowered to them. Sardines crammed in their thousands—every now and again riven by voracious seer or Khokari; they in turn to be bitten in half by an ugly huge headed monster of a gobra lurking behind the jetty piles—but then Nature to us always appears red in tooth and claw—and perhaps most of us delight in taking part in the never ending struggle.

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Plate XXI.



THE NAIR FISH.



THE NEW LIGHT

## CHAPTER XIII.

### ODDS AND ENDS.

**I** ONCE took a Jesuit priest out shooting with me, and we started in a little boat on the backwaters. He did not appear to be happy so I asked him what was worrying him. He said, "I am big, the boat is small, if we upset, the little crocodiles will eat us."

So we landed—and he shot me in the leg with a charge of No. 8. Then I thought the crocodiles were the lesser risk.

And I do not think that you need fear crocodiles much either, even when you wade in fairly deep. I remember one day, bathing in a delightful pool in the Tunga Bhadra, I barked my toe on what I thought was a rock, and cursed it accordingly. But when I was drying on the bank, the rock came to the surface, and started off down stream; so I shot it, an 8 feet crocodile, which was rather returning evil for good. And, the difficulty we had to get him out, he wasn't quite dead, and what little life he had left in him he made most excellent use of. My shikarri shoved a large stick in his mouth, while I hauled him out by the tail, and if you want to know the power of a Saurian's tail, just try catching hold of a wounded one by that appendage, but don't omit the precaution of the stick applied at the business end.

I know when first I came out I used to cut open every crocodile I shot, in the hopes of finding gold bangles and turquoise rings, and a few other such trifles, but I never found anything but bits of brick and such like. Once though I did find something—30 eggs—and I tried blowing them!!! Let us draw a veil over the fate of eight and twenty!! One of the two left, I believe a lady has still in her drawing room, the other which got cracked, I gave to one of the girls I loved, and she broke it up later, when my fickle fancy wandered. Why do people sometimes call them alligators? I believe that there are no 'gator in India, or out of America for that matter.

How to tell them apart. Watch them smile, and then if the lower canines fit into grooves in the upper jaw, he's a 'gator, and if into holes a crocodile (or mugger).

You can shoot or fish for crocodiles if you like. If the former—aim just where the head joins the body and break his spinal column. If hit in the right spot he will spread out, as if galvanised, and never move. Or you can try for his heart—if you think a crocodile has one—just behind the forelegs. But if you do not kill them outright you will lose 19 out of every 20 you hit, as they have a marvellous faculty of regaining the water.

Perhaps the best way to fish for them and the way which gives most sport, is to take a long hollow bamboo, say 8 or 10 feet, and to one end, 6 inches from the end, tie a stout piece of cord about 2 feet long, with a large hook fastened to it. Take the



precaution to open out the strands of your cord near the hook, or the crocodile will promptly bite through it. Then fasten a large chunk of meat on the hook, and set the bamboo adrift in any large pool, in which you know there are mugger, and get away well out of sight. If a mugger takes the bait, the buoyancy of the bamboo drives the hook into him and then when he sinks to the bottom, as his instinct is to do, up goes the free end of the bamboo. Then you can finish him as you think best. Get into a boat and "ride him" with hog spears, this gives the best fun. But go canny, as there is generally room enough left in his mouth for your leg, if available.

Before leaving crocodiles let me quote from an article that I wrote some time ago, on the different kinds to be found in India. I remember one dear young lady, hailing from the States, if I err not—saying "My, ain't he just the cutest little alligator!" And *He* mind you wasn't even a crocodile, only an iguana (or monitor, I should say). In India there are no such things as alligators, in fact the true alligator is found nowhere out of America. Crocodiles differ but slightly from alligators, the chief points wherein they vary being, that the latter has a broader and shorter head, with snout more obtuse, and the toes of the hind feet only partially webbed. But should you meet one in a hurry and be at a loss how to address him, notice this point; the two large canine teeth of under jaw fit into pits in upper jaw in case of an alligator, and in furrows in case of a crocodile. Now our friend, the crocodile, or *mugger* as he is often familiarly

called in this country, is interesting in this, that he shows an approach to warm-blooded animals, in having a four-chambered heart, quite different from the fish tribe, with the exception of the Cetacea or whales, and the dolphins. His limbs, being short, are unable to bear his heavy weight, therefore he drags his body somewhat, though for all that he is capable of making very fair time across country. The crocodile has many vices, but no virtues, at least up to the present not one has been discovered, though certain ones have been claimed for him by good kind people, who cannot bear to hurt the feelings even of a dormouse, but none of these virtues will bear the cold hard light of day. He has a pleasant habit of floating down stream with only just the tip of his snout showing above water, till he sees some unfortunate animal drinking unsuspectingly, then comes a splash and a rush; and if your money is on the *mugger*, you get home most every time, as the Yankees say. He never, or very seldom, attempts to kill his prey with his powerful jaws, but drags it down under the water, holding it there to drown; then proceeds to carefully bury it on some island till the meat shall suit his refined palate. The jackals and hyænas know of this little peculiarity of his, burying his food, and go round hunting for the *mugger's* larders like so many tramps hunting for a Tit-Bits treasure.

The crocodile also eats fish, but not so many as are generally attributed to him, since he is distinctly lazy and does not care to hustle round for his dinner like the vulgar crowd. Now to survey him again

from a naturalist's point of view. His dentition is peculiar, consisting of one single row of formidable teeth, each one of these is hollow and contains the germ of a larger tooth, which grows till it ousts the worn-out tooth, so that the fortunate *mugger* has always a mouthful of nice sharp teeth. But when he gets toothache, he gets it in two teeth instead of one. Hence his vile temper! There are three distinct families of crocodiles. First come the Garials; secondly the true crocodile; and thirdly the alligators. The latter, as I mentioned before, are only found in America. The Garials, who may be known by their very long and narrow snouts, frequent only the larger Indian rivers, such as the Ganges and Brahmaputra, in both of which they run to some 17 feet in length. There are altogether about 11 species of true crocodile, of which only four are found in Asia, three hailing from Africa, and four from America.

It is interesting to remember that some cities—notably Memphis—in ancient Egypt, looked on Crocodiles as Gods.

However it was not all peace and joy for the *mugger*. If some cities worshipped them it was the reverse with others. Apollinopolis, in particular, gave them a real bad time, the inhabitants holding that they were incarnations of "Typho," the genus of evil, and the city got up a yearly crocodile hunt, in which thousands of the animals were slaughtered, and everyone had a slap up good time, with the exception of the crocodiles, who voted the whole show a relic of barbarism.



The *mugger* loves to bask in the sun, on a sand-bank or rock, and lying there he looks exactly like a log. He never seems to sleep; no matter how wilily you may approach him, immediately he perceives your attentions are directed to him personally, there is a splash, and he is *non est*. Should the crocodile be taken unaware he feigns death, and does it so realistically, that failing any lethal weapon such as a good sized hatchet, you concede the palm of victory to the *mugger* and leave him in peace. In dry seasons they have the power of burying themselves in the mud, and æstivating for long periods, an accomplishment shared by the murrel fish also. (The alligator does not do this, but hibernates in a hole in the ground during the winter.) The *mugger* lays eggs, each batch numbering from 20 to 60; these the female usually buries in the sand to be hatched out by the heat of the sun. On the appearance of the young, Mrs. Crocodile looks after them, feeding them with food which she disgorges herself. She has to guard them, too, or their fond papa would have them as an entrée for dinner were he given half a chance. The eggs, which are about the size of goose's eggs, are eaten by some natives, though their flavour is distinctly musty and unpleasant. The flesh of the crocodile is very seldom eaten, though the negroes of Central America consider the tail of the alligator to be a delicacy. The crocodile has five toes behind and four in front, all more or less webbed. Only the centre three have claws. His eyes, nose and ears have lids or valves which enable them to be closed at will,—hence his

uncanny smile. The valve in his nose is of immense use to the *mugger*, enabling him to hold his prey under water for a sufficient time to drown it, without himself being suffocated. But the *mugger* is of a shy and retiring disposition, so let us leave him now, to return to that oblivion which his soul loveth.

### EELS.

Eels I hate, both to look at, to catch, and to eat. If you really want them for food for yourself or servants, the best way to catch them is to set night lines or give your servants lines and let them fish for them with worm, prawn or bits of fish. An excellent bait for eels, is eel. Cut up the first you catch and bait with small bits, and all his brothers and sisters will be eager for mementos of the dear departed.

He is a hateful brute an eel, the nasty way in which he takes your bait, and then curls his tail round a weed, deluding you into unholy and boisterous glee under the impression that you have got a 4-lb. fish on at least. And then when he comes up, he isn't a bit apologetic. He ties your cast into knots, makes your landing net into a horrid mess, if you are foolish enough to use it, and when you do get him on the bank, you find that he has got your hook so far down into his internal anatomy, that you generally leave it to him to digest at his leisure. No, my advice is that unless you can at once swing him clear to your henchman behind, out with your knife, and let him go hook and all. No, on second

thoughts always slay them, as they are great fry and spawn eaters.

#### TURTLES.

A turtle I have never caught, my only acquaintance with them is a bowing one, when one comes up, winks at one, and having successfully dodged the unerring half-brick, sinks to the bottom to continue his nefarious practises of hunting fry, and biting through angler's gut. I have also vague recollections of wildly chasing turtles on the West Coast, and trying to turn them on their backs, before they reached the water.

#### FROGS.

Really I could pity frogs, if only they had not such raucous voices and such a total absence of shame in using them.

Every man's hand seems to be against the frog. When he sits on the bank and sings merrily, the paddy and other birds eat him. When he betakes himself to the water for refuge he is immediately pounced on by Murrel and various other fishes. And he is a friendly little animal. In Madras especially the little house-frogs make themselves quite at home. They sit on your pillow, in your tooth glass, and even in your straw hat, and when you indignantly oust them, they jump with a flop on to the floor or into your boots, all spots are alike to them.

It is a curious fact that the lower class natives, whose tastes their staunchest advocate cannot call refined—never seem to eat frogs. The Chinese do,



and it's most amusing to watch them catching them, or take a hand at it oneself. Their methods are primitive but effectual.

They go out in pairs. One of the pair, usually a diminutive boy, holds in his hands a pair of grandfather's trousers, each leg tied at the bottom with a thinnish piece of string. He doesn't take father's nether garments, as father is probably too active, and would catch him.

This is the creel. No. 2 has a 6 feet bamboo, with a piece of string 6 or 7 feet long tied at one end. At the end of the string by way of bait, is tied—simply—a dirty piece of rag, no hook or anything. Then the fun begins; the rag is dangled down a bank, into a paddy field, swamp or canal, and pulled slowly up the bank. The rag seems to annoy froggie, as he jumps at it, and grabs hold, being swung up and deposited into the waiting trousers, before he has the presence of mind to let go.

I never could understand why the frogs took the rag, but it always seemed a sure bait with them, and I used to spend hours watching the Chinaman catching them after any heavy fall of rain. The only skill in the game lay in swinging the frog instantly into the trousers, as immediately froggie's astonishment was overcome he let go promptly, often with the result that he went happily flying into the water on the opposite side of the bund.

And one more thing concerning frogs, and that is the tadpoles. Really they are rather fascinating to watch sometimes, quaint little creatures all head and tail and no body, and then the utterly aimless

way they crowd together, heads in, for all the world just like a scrum at Rugby. And the varieties there are: Big black chaps, pale yellow ones, and bright orange hued little fellows, all wriggling happily about in the shallow water at the river's edge. And though to you they appear to be ugly shapeless little animals, this is by no means the case; catch one and examine it, and really the marking and colour though weird, has a distinct beauty of its own, and shows that Dame Nature's artistic touch extends even to the least among her myriad children.

#### JAPANESE FISHING.

And just a few words as to a method of fishing much in vogue in parts of Japan. Unfortunately when there I could not find an opportunity to see it, though I should much have liked to. The fishing is carried on by means of cormorants, large numbers of which are captured every year round the coasts of Japan. The birds when caught are handed over to trainers whose first act is to place a ring round their necks, which permits the birds swallowing any small fish they may catch, but effectually precludes their bolting the larger ones. The fishing always takes place at night and is carried out as follows. Each boat starts out with a complement of 3 or more men according to size. No. 1 manages the boat entirely. No. 2 holds a bamboo with which he continually strikes the water to keep the birds excited, whilst he also attends to a torch hung in the bows of the boat. Nos. 3, etc., look after the birds, one

man managing 4, 6 or even 10 birds. To the leg of each bird a string is attached, though some birds become so well trained that this precaution can be omitted in their cases. As soon as the fishing grounds are reached, the birds are lowered into the water and the torch kindled. The reflection of the latter in the water attracts the fish towards the surface, and down go the cormorants time after time, after each dive bird and fish are pulled back into the boat, when the fish is added to the basket, the bird being replaced for another dive.

#### LEECHES.

And these delightful little animals you will probably meet with, anyhow you are sure to if you fish the western ghaut streams after the monsoon. They are hateful pests as you will discover to your cost. Even in the most thrilling moments when close on the trail of an old solitary bison, your trackers will stop with exasperating nonchalance to calmly pick off the leeches with their knives. If you are in good health you have not much to fear from their bites, only *do* not scratch them; good advice, easily given but almost impossible to carry out. If you are not particularly fit the bites are apt to fester rather nastily, this being the case it is as well to wear leech drawers made of calico and tied above the waist. They should be made like wading trousers, feet and all with no openings. Even then you must look out for the little brutes getting down your neck and up your sleeves. If firmly stuck on



do not try and pull them off, but touch them with a drop of salt or gunpowder and they will fall off.

#### CRABS.

And these you may catch occasionally. I caught a monster once, fishing in an old moat known to contain large fish, but fish that could not be tempted anyhow. It was just at dusk; we were trying bottom-fishing with lumps of raw meat, when my float started slowly to move away.

I struck and up came a huge thing all legs and claws. He was not hooked at all, but was only hanging on to the meat, which he let go of just as he was successfully steered into the landing net. And then the joyous time we had trying to secure him, made more difficult by the gathering gloom. But we tied him up at last, and handed him over to our servants to eat; they were anxious that we should try him as soup, but we decided not.

#### PRAWNS.

Here we have another denizen of the deep whom I cannot abide. If you are float-fishing, and there are many of them about, they will nearly drive you to distraction. Down goes your float, slowly, slowly, varied occasionally by a short bob, and time after time you will strike, with no result, except that your temper wears thin.

The natives like fishing for them though, as they grow to 6 or 8 inches long. They use a small hook, and give the prawn plenty of time to gorge the bait. All the slow pulling of your float at first is the

prawn drawing your bait down, with his long arms.

Prawns are said to be good as bait, but you must shell them first. However I do not think any bait is so good as a small red worm, unless you are fishing for Labeo or Carps, when paste is the bait to use.

#### DOLPHINS, ALSO WHALES.

Now with justice you will say; "what are these paragraphs doing in a book of hints to beginners on Indian fishing?" and may be you are quite right. Neither dolphins or whales are fishes, if one calls them anything they come under the head of Mammalia; but they look like fish and ought to be fish, anyhow as you may possibly meet the former someday in India, disporting themselves in one of the larger rivers, they may as well have just a passing notice here. You will not catch unless by an extraordinary accident—a dolphin with rod and line, but you may see them caught occasionally by fishermen in their nets in the Ganges or Hooghly. I will quote here briefly from Sterndale's excellent notes on the subject. There are three species of dolphin found in the rivers of India and Burma. They are as follows:

- (1) *Platanista Gangetica*.
- (2) *Orcella Breviostriis*.
- (3) *Orcella Fluminalis*.

No. (1) is the porpoise of the Ganges, commonly called Soosoo in Hindi, and is found in the Ganges, Brahmaputra and Indus rivers. This dolphin

confines itself entirely to the fresh water and never goes near the sea. It runs from 6 to 8 feet in length and has a formidable mouth full of teeth. It is only in evidence as a rule during the cold season, the rest of the year it appears to confine itself to the deeper waters of the river. It has to come up to breathe about once a minute.

No. (2) the round-headed river dolphin inhabits the estuaries of the Ganges and Brahmaputra.

No. (3) also round-headed river dolphin, is only found in the Irrawaddy in Burma, and like the Gangetic porpoise confines itself entirely to fresh water. It runs to about 7 or  $7\frac{1}{2}$  feet in length, and can stay under water from 1 to  $1\frac{1}{2}$  minutes. It lives exclusively on fish, and the Burmans have a quaint idea that each river village has its guardian dolphin who drives the fish into their waiting nets. In fact so strong is this belief that lawsuits even have been instituted by one village against another, to recover a share of the fish, which one dolphin has driven into the rivals' nets.

I will only touch upon the marine dolphins, just to mention that there are several different sorts round the coasts of India; for instance,

*The Black Dolphin*—is found in the Bay of Bengal.

*The Lead-coloured Dolphin*—on the Malabar Coast.

*The Freckled Dolphin*—on the Madras Coast.

*The Spot-bellied Dolphin*—Do.

*The Spindle-shaped Dolphin*—Do.

And one or two other sorts are also found on the Madras Coast. The Long-snouted Dolphin is found off the Coasts of Ceylon and in the Indian ocean.



Then whales (Snub-nosed Cachalots) exist in the Bay of Bengal; but this is too big a matter altogether for so small a book.

### SHOOTING FISH.

Murrel may often be shot, though this is rather a poaching dodge. Still you may be out shooting with your rifle and come on a tank in which they abound. If in the heat of the day you will probably see the fish basking on the surface, or a few inches below. If under water remember to allow for refraction, *i.e.*, aim below your mark. The head is usually the best spot to aim at. If the fish are under water, you will only stun them, so have a man ready to go in and retrieve.

Another poaching dodge, but justifiable occasionally, is as follows: If you are fishing in a fair-sized tank which you know holds big fish, get an ordinary country bladder and blow it out tight, tying the mouth up with string. Tie also to the string a small stick like a pencil, about 6 inches long. On to this stick tie tightly the end of a piece of line and then wind some 6 feet round it. Then make a small slit at the bottom, and pass the line through, to prevent it unwinding. Leave 1 foot hanging clear. To the end of this tie a piece of stout gut, about a foot long, with a hook attached. On the hook put a dead frog. Then send it adrift so that it will float across the tank with the wind. If a fish takes your bait, the line is jerked from the slit and unwinds, and the fish plays itself. You meanwhile

watch from afar, and think out the best way to get at the bladder.

"And this is your boasted British jurisprudence," as the Babu said when the transport mule kicked him. So, a word in season, be careful when making an extra fine cast, to see that the country is all clear behind. I remember once fishing on the steps of a temple tank and meaning to daintily drop my fly over a rising fish. But all that happened, was a venerable old native gentleman's spotless puggarie came bounding down the steps, to his intense indignation and disgust. As I could not extract the fly, I broke, so perhaps he remembered me again, one day when pressing it more firmly on his head.

Again, three men were fishing a rapid for Mahseer. The scream of a reel brought two excited men to the third, but where was the big fish dashing madly hither and thither?

No, a moment's calm investigation revealed all. Away across country sped an unfortunate pariah dog, giving tongue, in a manner that would have caused half the Peshawar pack to die of envy, and out rushed the line, and the reel screamed merrily, 80 yards, 100 yards, 120 yards, only five more yards, what will happen, and on the air, pregnant with the breathless suspense of three watching men, came back a weird howl, and slack line, as the unfortunate pye made tracks for the eternal snows with the hooks of a 2-inch spoon buried deep in his tail.

And be careful of one thing. It is best to kill any fish of over 2-lb. weight before trying to extract your hooks, especially if they are treble ones, as very nasty accidents have occurred through the fish plunging, and the hooker becoming the hooked.

There are more ways than one of killing a fish. If a few smart blows on the head have no effect, thump the fish vigorously with your fist in the middle, having first laid him out flat. This will burst his bladder. With small fish squeeze them in the middle, or flip on the head with your finger.

And now there will be some I'm sure who will say, "But he never tells us whether the fish are good to eat or not"! Well, one doesn't go tiger shooting or pigsticking with a view to a meal in one's head, nor ought one to go fishing in such a manner. But certainly it is a great thing to feel that one's captures are some use after death. You don't get a skin or a pair of tushes as trophies off a fish.

Well, first you can rest assured that your servants and camp followers will eat all and any fish you may give them.

Mahomedans will eat fish too, without the necessity of "halal karoing" it. They say Allah has already "halal kiya" fish, referring to their gill openings.

As regards the fish for one's own table, so much depends on (i) the species of fish; (ii) their size; (iii) the water you catch them in; (iv) their condi-



tion ; (v) their cooking, and last, but not least, what sauce in the way of hunger you can bring to bear on them.

Personally I do not think the Indian fish (excluding Seer, Pomfret, and one or two other sea fish) come up to their confrères at home, like the Salmon, Trout, Sole, etc.

Batchwa are very good to eat, so are Barilius Bola ; and Chilwa, if caught in running water. The Indian Gudgeon is said to be nice : he doesn't look it !

Mahseer depend very much on the river, they are best to eat when weighing between 3 and 8 lbs., below 3 they are too bony, and above 8 they get coarse. Some turtles are good to eat, some are not. *Experientia docet.*

Megalops are too bony to be good. Carnatic carp are *not* good to eat—nowise—they are absolutely crammed with bones and their flesh is about as tasty as paper. Then the murrel, he perhaps is one of the nicest fish of all to eat, especially if he is caught in a river (if caught in a tank he is improved by being kept in clear fresh water, running for choice, for a day or two). Take out his bones however before serving him for table. Mahomedans like murrel particularly, and the presence of these fish in fort-moats and isolated tanks is often said to be due to the old Mussalman conquerors of India. The siluroids mostly are good to eat, at least Goonch and Wallago Attu are, the latter perhaps being the nicer of the two, the smaller they are the better the eating, since when they grow big their flesh becomes coarse. With all the siluroids the

large central bone should be removed entire. When my larder has been running low, I have occasionally in the jungle poached some small stream with my mosquito net and eaten the fry thus caught, trying to think they were white-bait but failing lamentably in the attempt.

Bamin and Nair, like most estuary fish, are good to eat; the Red Perch is also very excellent if well cooked.

For such of my readers who may be absolute novices, I may mention that most fishes are possessed of five fins, or pairs of fins, *i.e.*, Dorsal fin (on back), Caudal (or tail fin), Pectoral fins (on breast), and Ventral and Anal (nearest the tail) fins underneath. In some fishes, such as Wallago Attu, the two latter fins are merged in one.

*N.B.*—It should be noted here that the tail of a fish is understood to be that part of the body between the Anal and Caudal fins; it being a mistake to call the latter fin itself the tail.

Then most fishes have a lateral line running from the gills to the tail, on each side of their bodies; in some fish, especially scaleless ones, this line is much more clearly defined than in others.

Now some definition of remarks used at the end of description of fishes is required.

Ll. signifies lateral line, and Ll. 24-26 means that there are 24 to 26 scales intersected by the lateral line.

D signifies dorsal fin, and D<sub>3</sub>/9 means that the fin is composed of two different kinds of rays,

*i.e.*, the first three are probably spines, the remaining nine being branched rays. A horizontal line signifies variation in number, an oblique line distinction into two different kinds of rays, and a vertical line implies that there are two distinct dorsal fins. Thus D7-8 | 1/10-12 means that there are two dorsal fins, the first consisting of seven or eight rays all of one kind, the second of one ray—probably a spine, followed by 10 to 12 probably branched rays. D may be replaced by V. A. P. or C denoting the other fins.

$2\frac{1}{2}$  scales—signifies that there are two-and-a-half rows of scales between the Ll. and the ventral fin.

Then barbels—these may be variously placed.

If belonging to the nostril—they are termed nasal.

If at end of snout, rostral; under chin, mandibular; and at corners of upper jaw, maxillary.

And let me say a word here against selfishness in fishermen, I mean in the matter of keeping pet places dark. This, I think, is quite legitimate in the way of shooting, where perhaps your place if made public is visited just before your leave, by two or three so-called sportsmen who slaughter every thing they see, and ruin that place for the year, or perhaps for several years. But fishing is different, new fish come up every year; and out here there are not nearly enough anglers to overcrowd the good waters. "Do unto others as you would be done by." Tell about the good places



you know, and then when you are transferred, others will tell you of good spots near your new station.

Occasionally it will happen that though you have fished patiently from 4 P.M. till dusk, no luck will reward you; till, just as darkness falls the fish seem to start feeding. Then you will find it rather good fun sometimes to try fishing with a lamp. I also tried by moonlight, but never seemed to have as good sport as on the darker nights. The best lamp you can use is an ordinary acetylene bicycle or motor lamp, and if you paint your float with luminous paint you will find it a great improvement. The luminous paint by itself seems useless, but with a light shining on it shows up very much better than ordinary white paint. I have really only tried this night fishing seriously with Megalops, and have had one or two excellent hour's sport. There is a certain fascination in playing a fish in the dark, the brilliant flash of silver as the light is reflected from his gleaming side, then the rush out into the inky darkness beyond the pale of light, all lends a charm to the sport which is lacking in the clear light of day. One thing, do not have the light too near you, because of the thousands of mosquitoes and midges that collect round it. Train one of your servants to sit with the lamp near the water's edge and to keep your float in the centre of the circle of light.

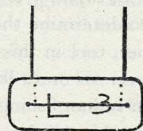
*Dress and Outfit.*—On neither of these headings have I anything to say; men out here very soon get to know what's what in the camp furniture line;

and as regards shikar dress, if a man is going to wear a white coat and blue breeches,—then a Cook's tourist guide is the book for him—as it is no use writing words of wisdom about shades of shikar cloth for such as he. Only one thing I would add; excellent shikar cloth can be got and at very reasonable cost, from any of the Basel Mission stations at Calicut, Cannanore, etc.

And a few words about marking fish; this is much done at home, and if only a few more sportsmen would try it out here, some interesting data might eventually be obtained about Mahseer and other Indian fish, which would add very materially to the general knowledge on the subject. Of course out here, the enormous size and length of rivers, the few English anglers, and the great number of Aryan brothers who fish by fair means and foul, are all considerations, and would probably mean that not one in 500 marked fish (and that is taking a sanguine view of the case) would ever be re-caught by any intelligent observer. Still one here and there might be so caught, and every little helps in the way of information on such a subject. Anyhow this might well be tried in tanks, especially where they are more or less private and preserved from netting by natives, and here data might fairly easily be collected concerning Rohu, Labeo, Murral, Wallago Attu, Megalops and other such fish.

By the courtesy of the Angling Editor of the Field, and the Secretary to the Fishery Board of Scotland, I was enabled to get some plates made up

similar to those in use at home, and am trying them out here. So might I make an appeal to readers:—should any one catch a marked fish (bearing one of my plates) would they kindly note the following particulars for communication to me. (Also, if possible, they might once more return the fish to the water):—(1) Species. (2) Where caught. (3) Weight. (4) Length—tip of nose to centre of fork in tail-fin. (5) Girth, by a tape passed round body just in front of dorsal fin. (6) Plate, whether brass or silver. The plates, either silver or brass are marked with L and a number (*i.e.*, L 1, L 16) and are fastened to base of dorsal fin. In England silver plates are used, this being done as most other metals would corrode from the action of the salt water when the salmon migrated to the sea; in India however there is no danger of this latter with the Mahseer; anyway personally I am experimenting with both brass and silver. The plate is as per diagram, and is fastened by the wires being driven through base of dorsal fin, then twisted together and ends cut off.



I may here remark '*en passant*', that it is no easy job to mark a fish on a real hot day, by a rocky river. Two hints—Play and land any fish to be marked as quick as possible. While marking, measuring, etc., occasionally hold fish in water right way up, and do not let them turn on their sides or belly up. Particularly do this when you have finished marking them, and see that fish is pretty strong before leaving go of him.



#### CHAPTER XIV.

### TACKLE.

**A**ND now a few words as to tackle. Of course opinion is bound to differ a great deal on many points. A man who has killed lots of fish on a 2-inch spoon will swear by that; another man may say he has always found a 1-inch best.

The size of the river, nature and weight of the fish, rapidity of current; various things may all help to determine the tackle you will use. And remember, too, in this little book I am not talking of fish over 10 or 12 lbs. as a rule. Not many beginners in Indian fishing are likely to start their fishing with catching 30 or 40-pounders; should they, however, be so lucky as to get the chance, they would be pretty certain to have a mentor with them, whose presence would enable them to dispense with the services of this humble volume.

Of course some men after they have fished and made bags of the smaller fish, will aspire to visit the haunts of the large fish, and catch them likewise, but by the time they start to tackle the monsters they will have pretty fixed ideas of their own about rods, lines, etc. And so to business.

## ROD.

Your first consideration will be your rod. If you are lucky enough to be blessed with the goods of this world, more than most of us exiles are, go to a good maker and get a steel-centred rod with lock-fast joints.

Anyway get the best rod that you can afford, remember that on it may depend to a great extent whether your trip is a success or a ghastly failure. Lock-fast joints you will find are well worth the extra that you may pay for them.

As to length—please yourself as to a 14 or 16-foot rod. I would not recommend heavier than that. Remember that in India you are often fishing in the heat of the day, and to be able to wield one's rod with comfort is a great consideration. And then on a lighter rod one can use so much lighter tackle.

Personally I would far rather take 15 minutes to land a game 10-pounder with light tackle on a 14-foot rod, than I would to land the same fish in 10 minutes on a 16-foot rod. Always have a spare top to your rod, and also get a short stiff spinning-top as well, for use when fishing for Goonch or other such fish. Whenever possible, though, use the fly top to your rod; you put less strain on your trace and collar, and you will find it far pleasanter for playing the fish. And a pliant top acts as a sort of cushion to any jerks or plunges the fish may make.

And remember that a stiff powerful rod will not cast a fine line well, whereas a whippy pliable one is not suitable for casting heavy lines. If you can afford to set yourself up well in rods; get—(1) a 16'

with two fly tops—a rod bordering on the stiff rather than the whippy side; (2) a 14' with two fly tops, and also a spare short top for spinning for goonch, nair, bamin, etc.; (3) a 12' for a single handed fly rod, and possessing a short top making it a 10' one for bottom fishing and tank-angling; and (4) and lastly a little 10' fly rod. For this latter you might well get one of those small ones, called either portmanteau or cyclists' rods. They are most excellent little rods, a small ten-footer is a good size, each joint 2' long. Mine has an extra short top making it a very powerful little nine-footer, and it will comfortably go in any portmanteau or uniform case, and is also a convenient size to fasten on a cycle. Your rods may be either split cane—with or without steel centre—or greenheart. The former are of course far more expensive, a good steel-centred split cane costing perhaps three times what a greenheart rod of the same style would. And a greenheart rod will fulfil all the conditions one wants out here, and if got from a good maker they are delightful to use. If you only wish to get one rod for all round fishing, *i.e.*, for Mahseer, estuary fishing, etc.—since for tank-angling and the smaller fly-takers you *must* have separate rods—get a good 14' with two fly and one shorter top. My 14' greenheart, which is quite my favourite rod, has three tops. With No. 1 it is 14' and does for all fly-fishing and light spoons. No. 2 makes a 13½' rod, much more powerful and suitable for all spoons, natural bait, etc.; while the short top makes a 12' rod, excellent for trolling for goonch, or fishing for bamin and nair.



And if one casts from the reel one can get out an astonishingly long line with a short powerful rod. Why I advocate the two fly tops for use in Mahseer fishing, instead of short stiff tops, is for two reasons. One is that one's pleasure is much enhanced by the greater play the rod gives, and by the lighter tackle one can thereby use; and the other reason is because of the tremendous wrench a Mahseer so often gives one's rod top, and which a pliant top humours by instantly giving to, but which with a stiff top sometimes spells disaster to rod or tackle. Below are given a few Mahseer rods, by good makers, with their prices, in case any reader has no tackle maker and possesses an open mind on the subject. I have purposely omitted here rods made or sold by shops in this country, as I have no wish to make distinctions between firms out here, and also it is easy for intending purchasers to write for and get catalogues in a short space of time.

*Hardy Bros.*—"Hi Regan" 16' double cane built, steel centre, 3 pigges, 2 tops, lock-fast joints, pigskin or cork handle, bridge rings, weight 38 ozs.—£10.

" " "Cholmondeley Pennells" general rod; 14' cane built, steel centre, lock-joints, etc. Has 2 full-length fly tops, also a spinning top  $\frac{2}{3}$ rd length of fly tops, and another shorter top for heavy trolling. Price £9-5-0, or same rod in greenheart £4-5-6.

*Hardy Bros.*—Alnwick greenheart rods, with lock-fast joints, universal winch fittings, cork handles, two tops. 16' first quality, £3-14-0. Second quality, £2. 14' first quality, £3-1-0 2nd Cedar handle and plain joints, £1-13-0.

*Farlows.*—Split cane salmon rods, steel-centred, lock-fast fittings, snake rings, cork grips, 3 pieces, 2 tops, 16' £9-0-0. 14' £7-0-0.

„ Greenheart salmon rods, cork handle, suction joints, 2 tops, best finish, 3 pieces. 16' £3-5-0.

„ Greenheart trout rods, 3 pieces, 2 tops, extra finish. 14' £2-10-0.

*Little's.*—“Balmoral” split cane rods, fitted cork handles, snake rings, rubber button and plain bronzed fittings, 3 joints. 16' £7-15-0.

„ “Haymarket” salmon rods, greenheart, universal winch fittings, snake rings, plain joints, 2 tops, best quality. 16' £2-17-6.

„ Grilse Balmoral rods as above. 14' £5-15-0.

„ Grilse greenheart rods as above. 14' £2-5-0.

*Army & Navy Co. Soc., Ltd.*—“Army & Navy” split cane salmon rods, double build, steel centre, 3 joints. 16' £6-7-6.

*Army & Navy Co. Soc., Ltd.*—Greenheart salmon rods, 2 tops, 3 joints, cork grip very superior. 16' £2-3-0.

„ Split cane double handed fly rods, 3 pieces, suction joints, snake rings, india-rubber button, 2 tops and steel centre. 13' or 14' £5-2-0.

„ A. & N. S. Mahseer rods, greenheart, 3 joints, 3 tops. 14' £2-4-6. 16' £2-10-6

*Carter's.*— Tubular steel centre cane built rods, with pneumatic button and 2 tops. 16' £8-8-0. 14' £6-6-0.

„ Cane built rods, steel centre, cork handles, lock-fast joints, snake rings, 3 pieces, 2 tops. 16' £6-6-0. 14' £4-15-0.

„ Greenheart fly rods, best quality, cork handles, snake rings, lock joints, 3 pieces, 2 tops. 16' £1-15-6. 14' £1-11-0.

Also Foster Bros. of Ashbourne make a speciality of steel-ribbed rods, but of these I regret that I have no particulars.

### REEL.

Now as to reel or winch. Most of the reels that one gets from home are rather narrow between the plates, and therefore too small for the length of line that one requires out here. This is a point to remember, so generally order your reel  $\frac{1}{4}$  or  $\frac{1}{2}$  an inch bigger than you would otherwise get for your rod



if you only intended it for fishing at home. With a rod of 14' or over you will want a reel of at least 4" diameter for mahseer fishing, or say a reel capable of holding 80 or 100 yards of stout or medium salmon line; this will mean that it will hold half as much again, if you use a good percentage of backing line upon your reel. This for spinning with; for fly fishing of course a smaller reel will suffice, a 3 or 3½ inch being a convenient size. There are so many good reels on the market, and each tackle maker has his own speciality, that it is hard to advise concerning any particular kinds, a winch made by Messrs. Little & Co., with Mr. Thomas' brake attachment is an excellent one for heavy fish, while the silex reel made by Hardy Bros. is as perfect a winch as one could desire both for casting from the reel direct or for ordinary use in fly fishing. One thing I would advise, and that is do not economise over your reel, a good one is far more essential out here than it is at home where you are within a day's reach of a tackle maker always. Besides with Mahseer a reel is subjected to tremendous strains, and a cheap one will suddenly go to pieces sometimes in the middle of a run, or worse still jamb, when your tackle if not your rod top goes as the result. Wooden reels will not stand this country; winches should be metal throughout, either gun-metal or aluminium. Also the handle or handles should be revolving ones and let into the winch plate direct, without cranks. The check should be strong, but not too stiff. Personally I am rather enamoured of an adjustable check, has brought

to great perfection in the sillex reel mentioned above, but some men do not care about them, holding that the simpler the construction of the reel the better. A few specialities in reels are noted below, for the convenience of those who may have no makers' catalogues to hand. Prices quoted are all for  $4\frac{1}{2}$ -inch reels, of course the smaller ones are cheaper—

The "Perfect reel" made by Hardy Bros. has a regulating check, which can be adjusted to a nicety. Other advantages claimed by the makers are—Lightness, smooth running and greater line carrying capacity than most reels, also easily taken to pieces to clean. Price £2-10-0.

The "Sillex" reel, Hardy Bros. This is a most beautiful piece of workmanship, possesses great strength combined with lightness, has an adjustable check, also a lever by pressing on which with the finger the drum runs free and it is possible to make very long casts from the reel with the minimum of exertion. Also it is the easiest of matters to take the reel to pieces—with one's fingers only—to clean. It has a large drum and is very quick winding. *Appropos* of this it struck me that it hardly held sufficient line for Mahseer fishing, but Messrs. Hardy Bros. very kindly made me up a reel broader between the plates, for no extra charge, and now the reel is I think quite perfect. Price £2-10-0

"Patent lever" salmon winch, made by Farlow, designed to effect an adjustable check upon the revolving plate, so that power can be applied at will. The regulating screw being on the outside of

the winch plate, can be easily turned by the fingers. Price £3.

Also made in aluminium, very light. Price £4.

The "Duplex Casting" reel, made by Little & Co., can be used either as an ordinary check winch, or by giving a metal collet a half turn converted into a casting reel with free running spool. To check spool, either push on check or press hand plate inwards towards reel. Price £1-15-0.

Then there is "Thomas' Mahseer" reel, also made by Little & Co. It is a strong gun-metal reel made purposely to hold the long lines used in India, and the revolving plate has a V-shaped groove in edge. The brake is a V-shaped wedge, with a thumb piece, and is fastened to the reel plate by a steel spring, the wedge being just clear of groove in revolving plate. By pressure on the thumb piece any power can be applied at will, by taking pressure off thumb piece brake immediately disengages.  $4\frac{1}{4}$ ". Price £2.

The "Coxon Aerial" reel, sold by A. & N. S., Carter, Little and probably other makers. It is exceedingly light, and has an optional check. Price £1-7-6 (Little). £0-17-6, Stores and Carter.

"Mallocks" Improved Patent Casting reels, with reversible drum and optional check. Sold by Stores, Carter, etc. Price £1-14-6.

"Army and Navy" bronzed revolving plate winches, ordinary pattern but with variable check. The check is regulated by a small screw sunk into plate, turning to right reduces, to left increases, amount of check. Price £1-7-0.



"Slater's" Combination Nottingham Pattern reels, with optional check action, made in alloyed aluminium, very light. Store's price £1-13-0.

Then the "Moscrop" patent reel, sold by Stores, Carter and probably others. Advantages claimed. No screws, taken to pieces by fingers alone in 10 seconds; is ventilated, has adjustable drag; strength and simplicity. Price £1-7-0 (Stores). £1-4-6 (Carter). Weight 22 ozs. The weight has always struck me as being the disadvantage of this reel.

As regards "Winch Fittings" perhaps the two best are,—"Warner's wedge fast" and "Hardy's Universal" winch fittings.

#### LINE.

As to line. There are such a large number of good lines on the market, that it is hard to advise any particular kind. Deal with a good maker, and get your line equal in thickness to light or medium salmon in the case of fly line, and medium to stout in the case of spinning. The Manchester spinning line sign 64 is good and strong enough for any fish, also it is very fairly cheap and lasts well. I have always however found the Manchester Spinning Co. very difficult people to get anything out of, but your tackle makers at home should manage it for you.

You will hardly ever want more than 100 yards, and 150 yards ought to be ample even for the biggest fish; and if expense is a consideration, have only 40 yards of running line, and the rest good, strong, backing line.

Always—the following is most important—dry your line before putting it away, unreel all the wet portion, and stretch it out across two chairs, or in any other way convenient. If you do not do this your line will quickly rot, and the first good-sized fish you get on will promptly break you.

For the smaller fly-takers get fine or stout trout line, depending on which fish you may expect to go after. For bottom fishing, tussa line is much recommended, personally I do not care about it as it has such a passion for kinking. Any good water-proofed line, stout trout or light salmon will do you all right. For the fly-takers, 30 yards should suffice you. For bottom fishing, 40—80 yards dependent on the sizes of fish expected and waters fished.

#### CASTS AND TRACES.

Casts for use fly fishing; use stout salmon gut for Malhseer, light salmon for Carnatic Carp, and trout casts of varying thickness for the smaller fly-takers. For small fish like the barils and chilwa use the very finest gut procurable. Three yards is a good ordinary length for casts. Now as to traces. Since such great strides have been made in perfecting wire for this purpose, double and treble gut traces are hardly ever seen now in this country, gimp also has been ousted by twisted and rust-proof wire. Still where the water is fairly clear from snags and the fish do not run very big, some men prefer to stick to stout gut. Of the different wires on the market, two of the best known are undoubtedly the "Hercules" rust-proof and the "Killin" wire. The

former is made of innumerable strands of bronzed steel wire twisted together, and is beautifully pliable and exceedingly strong. The Killin wire is a plain blued single steel wire something like the wires used on a zither. Whichever you use it is better to buy it by the reel, and make up your traces yourself, unless of course expense is no object then buy them ready made by all means. The Hercules wire, which personally I always use, is made in varying thicknesses, Nos. 1/0 and 2/0, are useful sizes and the ones you will most generally want. Traces should be about two yards in length, though you can make them as short as 1 yard if the water is very heavy, or as long as 3 yards if very fine fishing is required; but 5 to 6 feet is a good useful length. Put on your swivels according to fancy, you should have at least two on a 2-yard trace. Put a swivel one foot away from each end of trace leaving a clear 4 feet between; or put a buckle swivel at bait end of trace, a second swivel 3' up and a third at 6" from the end next your running line. But please yourself regarding swivels, there is no fixed rule regarding such, except to remember that the fewer the better, but there must be enough to save your wire from twisting and kinking, the latter the fatal foe of all wire traces. Have a small loop at the end to which you mean to fasten your running line, at the other end have either a buckle swivel or else a loop large enough for a 3" spoon or a natural bait to pass through. If you are making up your own traces, put the end of your wire twice through the eye of each swivel, then



twist end neatly round the other wire (twisting one way you will find that it will amalgamate perfectly, the other way not), bind tightly with well waxed silk and put a good coating of shellac varnish over it. Always test your casts and traces—after soaking if gut—before using, it is better to break on the bank where you can repair them, than to see the fish of the day going off with a pet spoon and half your trace.

#### SWIVELS.

German silver swivels are perhaps the best, or else steel swivels very heavily silvered over. Always have a certain number of double swivels, and a few buckle swivels are useful. These latter are very handy for the end of one's trace, as they obviate the trouble of passing the spoon through a loop on the trace, or, if using dead bait, they enable one to change to a new flight rapidly. Some men however, are very down on them, still they are good enough for small fish. You do not want many different sizes among your assortment of swivels, Nos. 4 and 5, especially the latter, are the most generally useful, while No. 6 is a good size for live-baiting for Megalops, Murrel, etc. A good thing to remember when you get new swivels, is to treat each one to a drop of oil and a pinch of emery powder, and then revolve both ends sharply with the fingers a few times. This improves swivels greatly and gives them a chance to start fair by removing any stickiness.

Plate XXII.

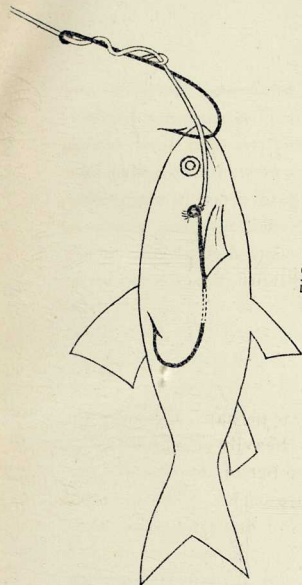


FIG 3

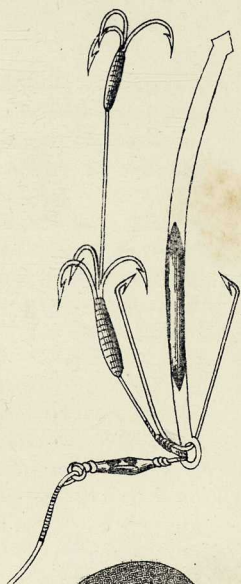


FIG 4

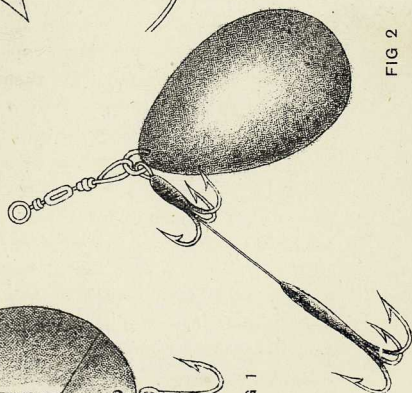


FIG 2

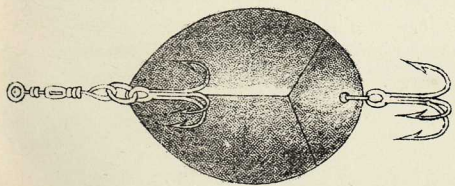
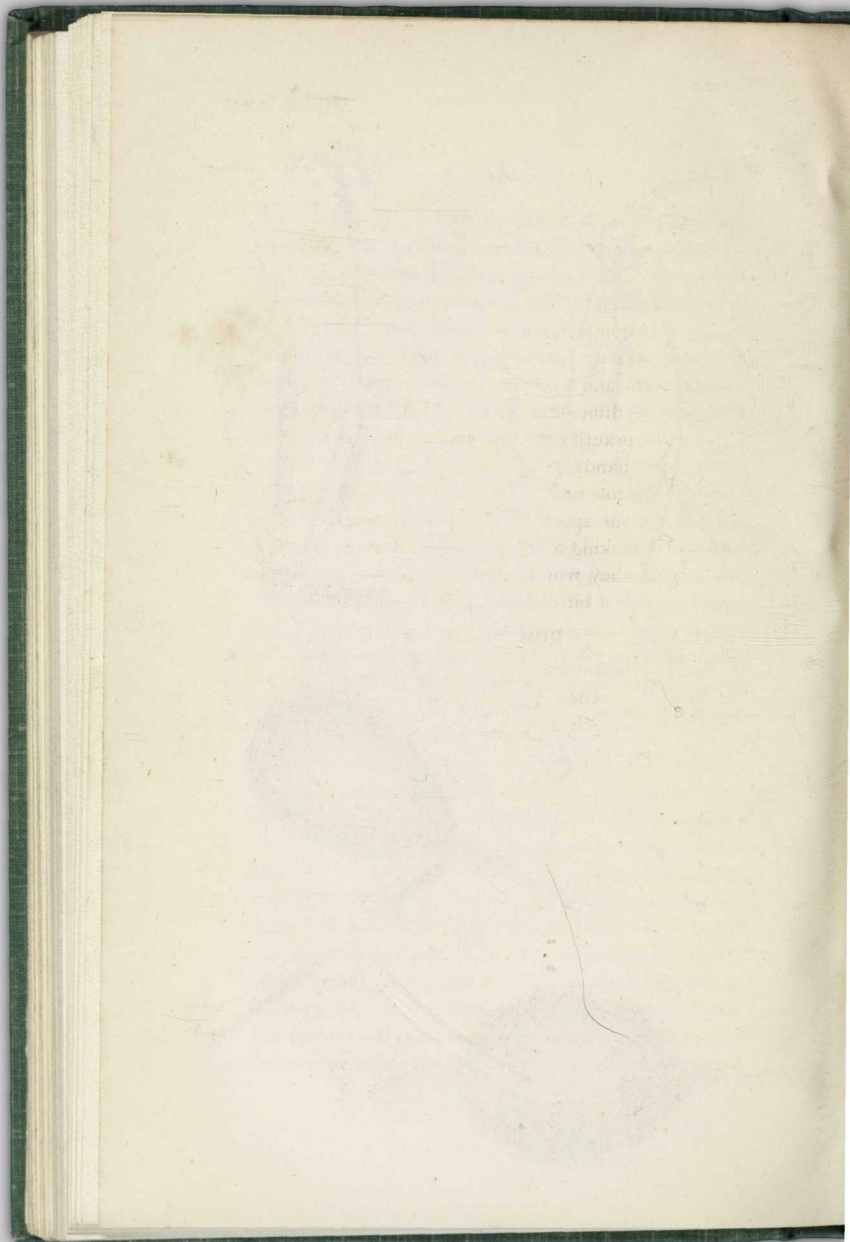


FIG 1





### SPLIT RINGS.

Split rings are things to be avoided; they appear to be made only for ornament, not use. If you buy your spoons and phantoms ready-made see that they are mounted on solid rings.

If you make up your own, use brass wire to fasten your swivels and hooks to the spoons or phantoms. It is a little difficult to mount them neatly at first, but a little practice and a pair of pliers will make you pretty handy at it soon. And do not worry about being too neat. I know this sounds heresy, but when your spoon or phantom is spinning in a rapid, and making a small race of its own, and fish are hungry, they won't, as a rule, detect the difference between a bit of brass wire and a split ring!

### ROD RINGS.

The old fashioned loose rings have now been entirely superseded by firm rings, which are of various sorts, such as Snake, Upright, Bridge rings, etc. These are all good. For the top ring (and also the butt ring of bigger rods) it is as well to have a revolving ring of phosphor bronze; *i.e.*, the ring itself is firm but it has an inside moveable rim, which by occasionally shifting brings a different surface round for the line to run over, thus prolonging both its own life and that of the line.

### SPOONS.

Of spoons there are various shapes, please yourself. Plate XXII, Figs. 1 and 2 show two different spoons; the former mounted with head and tail hooks, and the latter with the flying mount, so

popular in the Punjab. For my own part, I generally mount all my spoons up to 2" with the flying mount, over two inch with head and tail triangles, (though I have some 3" spoons with flying mounts for use in slack water).

The flying mount can be varied with 2 single hooks, or a good combination is a single hook at the top and a triangle at bottom. The two spoons are simply drawn different shapes to show variations, both spin well if properly mounted. And now a word as to mounting; be careful if making up your own spoons not to use too big and too heavy hooks. If you find that your spoon does not spin true, the chances will be that your hooks are too heavy for it.

For mounting spoons the following sizes of hooks and swivels may be taken as a rough guide: For large spoons, say over 3", use No. 4 swivels, for all others No. 5 should suffice, and use a double swivel if the spoon is of fair size and weight.

As regards triangles, for a 1" spoon use, say, No. 12 as your top hook and No. 11 at bottom. For a 2" spoon No. 6 at top and No. 5 at bottom, and for a 3" spoon No. 3 at top and No. 2 at bottom. And remember always the finer you fish the better.

A spoon is a very slippery bait, and once a fish dashes at a spoon, the chances are he hooks himself.

Avoid, with all baits, using formidable arrays of hooks. Indian waters are very bright and clear, remember; and also the bigger Carps, like Mahseer, have leathery mouths giving excellent hook-hold. With others of the predacious fishes which have

mouths full of teeth, you can generally add an extra treble to phantoms and dead baits.

Spoons are expensive things to buy, so I always make up my own. Buy a sheet of brass in the bazaar (you can get a large enough piece for 4 annas to make about 20 1-inch spoons). Give any blacksmith a pattern and he will cut you out two or three dozen in an hour. Go to any big shop that does silver-plating or nickel-plating and ask if they will plate them for you. I get mine done for about Re. 1 per dozen, one side bright and the other dulled. The dull side you can leave as it is, or have burnished up, or paint with gold paint and varnish. There you have your spoon. Mount it with solid trebles and a good swivel. Fasten your treble and swivel on with brass wire. The whole spoon (according to size) can be made for from 6 to 12 annas.

And personally I have found them just as effective as shop-made ones. In one pool in which I caught over 10 Mahseer in a day, I tried, as an experiment, using different spoons—(i) a shop one beautiful to look at—gilt and silver, (ii) a shop one all silver, (iii) a silvered one of my own, (iv) one cut out of the lid of a biscuit tin, and (v) a plain brass one polished bright, and as far as catching fish was concerned, there seemed not the slightest difference in any of them, though I must admit that the biscuit tin one never came up to the scratch in the second round.

#### FLIES.

About flies I have practically nothing more to add here, the various ones recommended are men-



tioned in the different chapters on Mahseer, Carnatic carp, etc. But it might be of help if I put in here a few illustrations and hints on the tying of flies, which was taught me in times gone by, by a keen Indian angler, as a day may come when in the jungles you run completely out of flies, and then a rough home made fly is much better than none at all; and some may prefer to tie their own flies always. For the crudeness of my drawings I must apologise.

Fig. 1.—Two pieces of feather of equal size to form wings.

Fig. 2.—Jungle cock hackle or any like feather.

Fig. 3.—Lay the 2 wings in position and then with a piece of well waxed silk, take 3 or 4 turns round their ends near eye of hook. Then place hackle in position and take another couple of turns round it with the silk. Cut off short ends of wings and hackle outside binding.

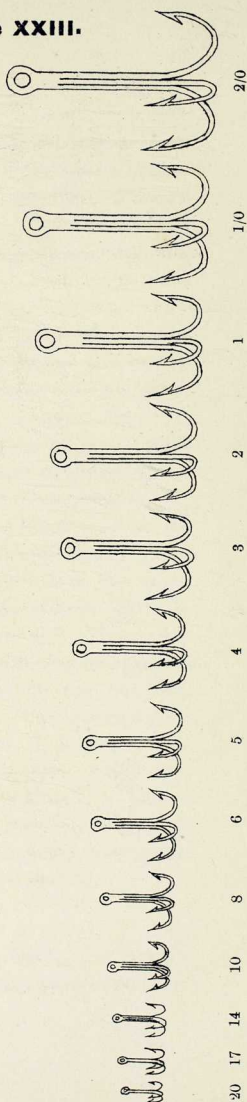
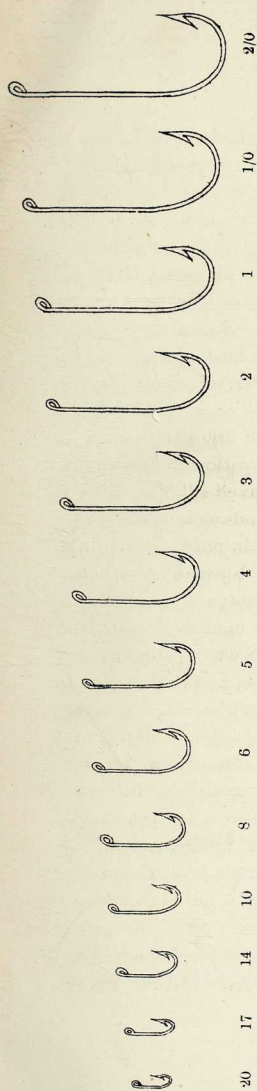
Fig. 4.—Having brought your waxed silk, wound round shank of hook, and cutting down a small piece of wing feathers to make tail of fly, make a loop in binding opposite point of hook, and pull tight; then on your silk which by the way should be well waxed, stick some pigswool (or other material for making bodies of flies) and wind this round and round till body is of required thickness.

Fig. 5.—Take hackle and twist twice behind and under wings, and then once round in front, and having cleaned your silk of

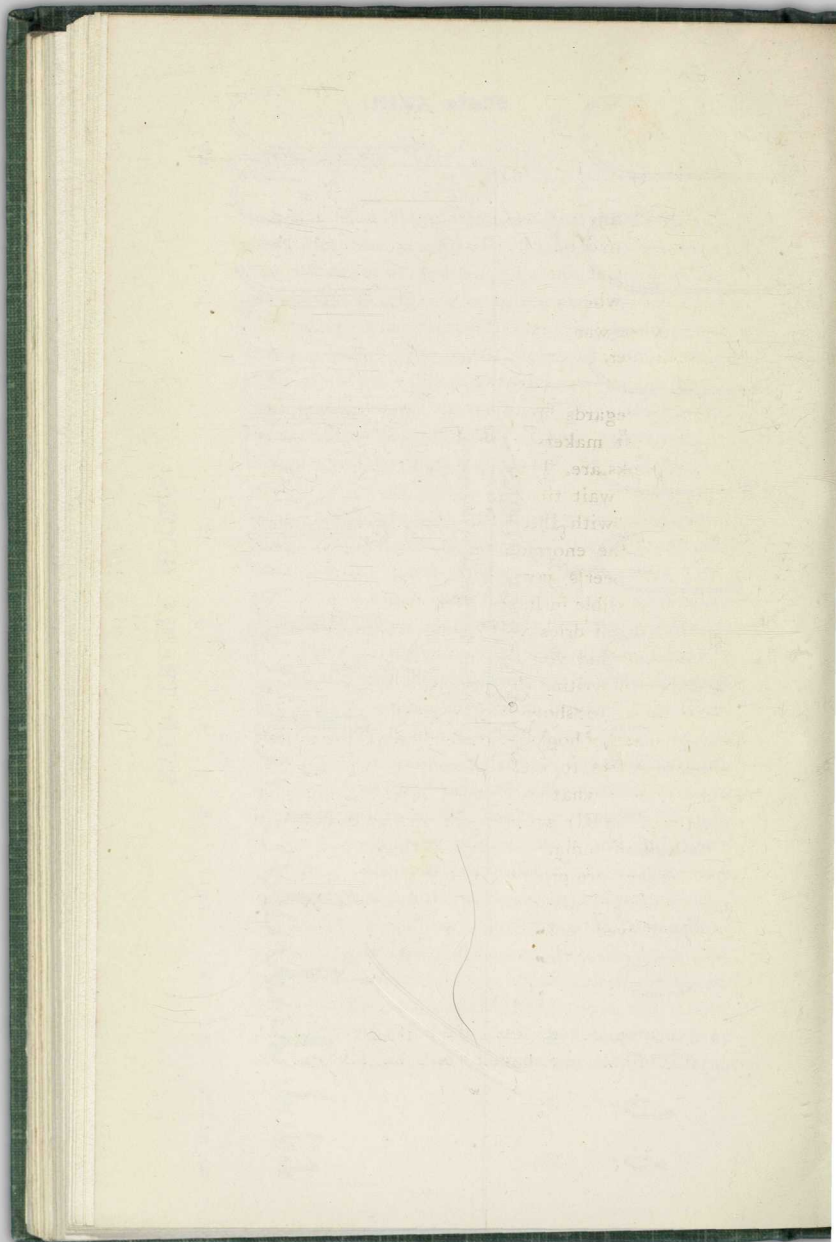
**Plate XXIII.**

**EYED LIMERICK HOOKS.**

(Smaller intermediate sizes omitted to save space.)



**EYED TREBLE HOOKS.**





any pigswool left on it, take 3 turns over hackle, make a loop and pull tight. Cut off ends and varnish silk well wherever exposed.

*N.B.*—If you want to put any tinsel on the body, you can do this after.

### HOOKS.

Then as regards hooks. Get good stout treble hooks. Most makers at home know now what Mahseer hooks are. They may strike you as clumsy at first, but wait till you get a spoon back all crumpled up, with the hooks gone to glory, then you realize the enormous powers of compression that a Mahseer's jaws have. Use eyed hooks whenever possible in India. The binding on hooks mounted to gut dries very quickly in this country, and you will find you lose many fish in this way. Remember in writing for hooks, always draw a sample hook to show size wanted. There are different scales of hooks, and trouble and disappointment are liable to occur if you do not carefully specify exactly what you want. The scales I give you (Plate XXIII) are the same as laid down in "The Rod in India." I choose those scales purposely as they are probably better known to Indian anglers than any other scales. If fishing with float and worm, eyed hooks are not so good, as the worm will not pass over the eye without tearing.

### FLOATS.

As regards floats. For live-baiting for Murrail, use an ordinary egg-shaped float, as one uses for

Pike at home, or else one made up as laid down in the chapter on Megalops. For any other float fishing in tanks, let me commend to your notice the excellent little floats evolved by Mr Thomas, and called "Detective" or "Labeo" floats. They are very easy to make. Take one of a peacock's tail feathers—you can buy them in any bazaar—and cut off the last 4 inches of thick quill. Then take off the next 6 inches and carefully snip the harl away from this. Here is the float. To make it up for use—varnish it, paint 3 bands of red,  $\frac{1}{2}$  an inch broad each, alternating with  $\frac{1}{2}$  inch bands of natural colour, starting from one end. At the other end bind on with waxed silk a small loop of stout running line, and your float is complete. (Plate XXIV, Fig. 1.)

To fix it on your line. Make a loop in your running line, and pass it through loop on float, pull sufficient through to pass over top of float, and then pull the running line taut again, and your float is on. A little persuasion is all that is necessary to slip it up or down till you have it at the right depth. The great advantage of these floats is that your running line is only fastened to one end, so that they are much more sensitive to the smallest bite. Also you can put them on or take them off easily, no untying of collar, or bothering with small float caps.

For float fishing in rivers, perhaps the best floats one can use, are the Nottingham floats. (Plate XXV, Fig. 3.) To explain their use. The Nottingham float is curved instead of straight,

and the bottom ring is at right angles to the shaft. Instead of a cap up above there is another ring identical with the bottom one. The line being passed through these two rings, the float is not fixed and so can travel up and down at will. On your cast or line, at the depth you wish to fish, a small stick or piece of wire is fastened, above the float. The advantage of this is, that in casting your bait the float is down near it, and owing to the additional weight you can get out a longer cast. Then on reaching the water the line runs through the float rings till checked by the small stick and wherever you strike the float slips down and is not jerked out of water each time.

#### LEADS.

Next as to weighting your line. If you simply want a sinker for live-baiting use a conical 12-bore bullet, as you cannot have anything better than that. If for trolling,—there are various kinds made. Look up in any maker's catalogue and choose for yourself. The *Fishing Gazette* leads are very good ones.

For ordinary spinning or float-fishing very useful leads are the Simplex leads made in assorted sizes by Hardy Bros. and which are easily put on or taken off your trace or cast. And if going on a fishing trip. I should advise you to take some soft lead wire, as this is excellent for making up weights, either after approved patterns, or to suit your own devices.



### PHANTOMS, Etc.

Devons, minnows, phantoms, etc. You will want a certain number of these; 3 or 4 inches are good sizes, as you can use these without straining your fly top. Personally I always remove one treble hook from each, you do not need more than 2 trebles; at any rate not for Mahseer, though, as I mentioned before, if you are after any fish whose mouths are full of teeth, you can leave the extra treble on.

With regard to colours, of course this is largely a matter of choice, but personally I always lean to as silvery a one as possible, especially blue or green and silver. A very excellent imitation fish, is the "wagtail" made by two or three makers, they spin most beautifully, last well and are cheaper than the ordinary phantoms.

### MOUNTING BAITS.

To mount dead or live-bait. There are many and various devices for the former all of which have the advantage of enabling you to mount your bait quickly. The worst of most spinners is that they are too formidable, and if you are using a small fish as bait there is too much frame-work and too little fish. Still that cannot be helped, and after all the fish do not appear to take notice of the fans. Plate XXII, Fig. 4 shows perhaps one of the neatest spinners—the Coxon. The figure explains itself, except that the leaded spike is of soft metal and after insertion the bait can be bent to take any curve required. But there are such a vast number

Plate XXIV.

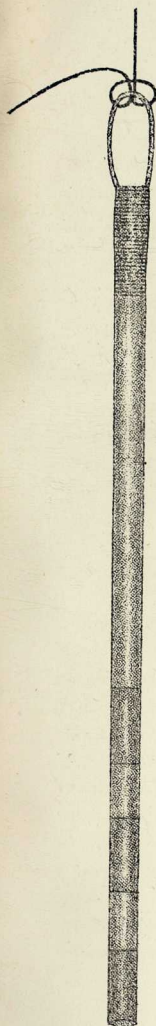


FIG 1

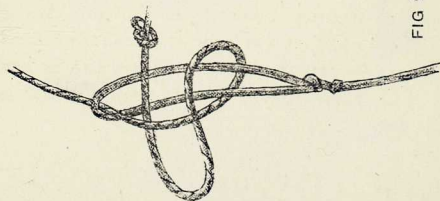


FIG 2

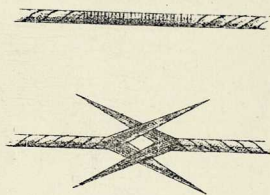


FIG 3

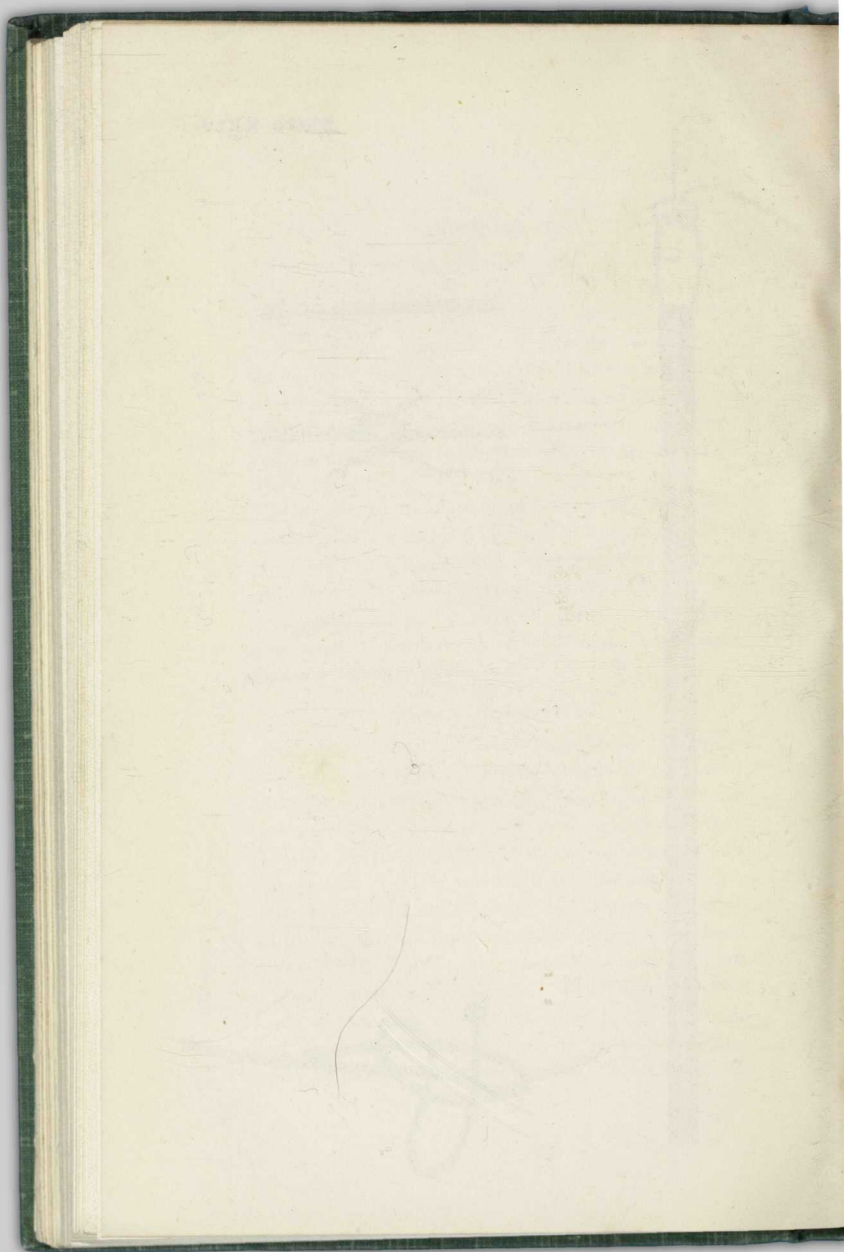




Plate XXV.

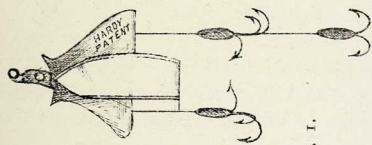


Fig. 1.

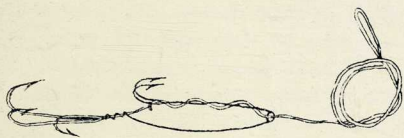


Fig. 3.



Fig. 2.

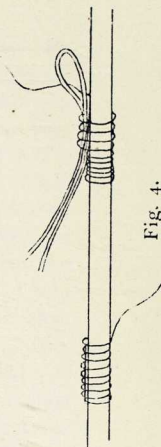
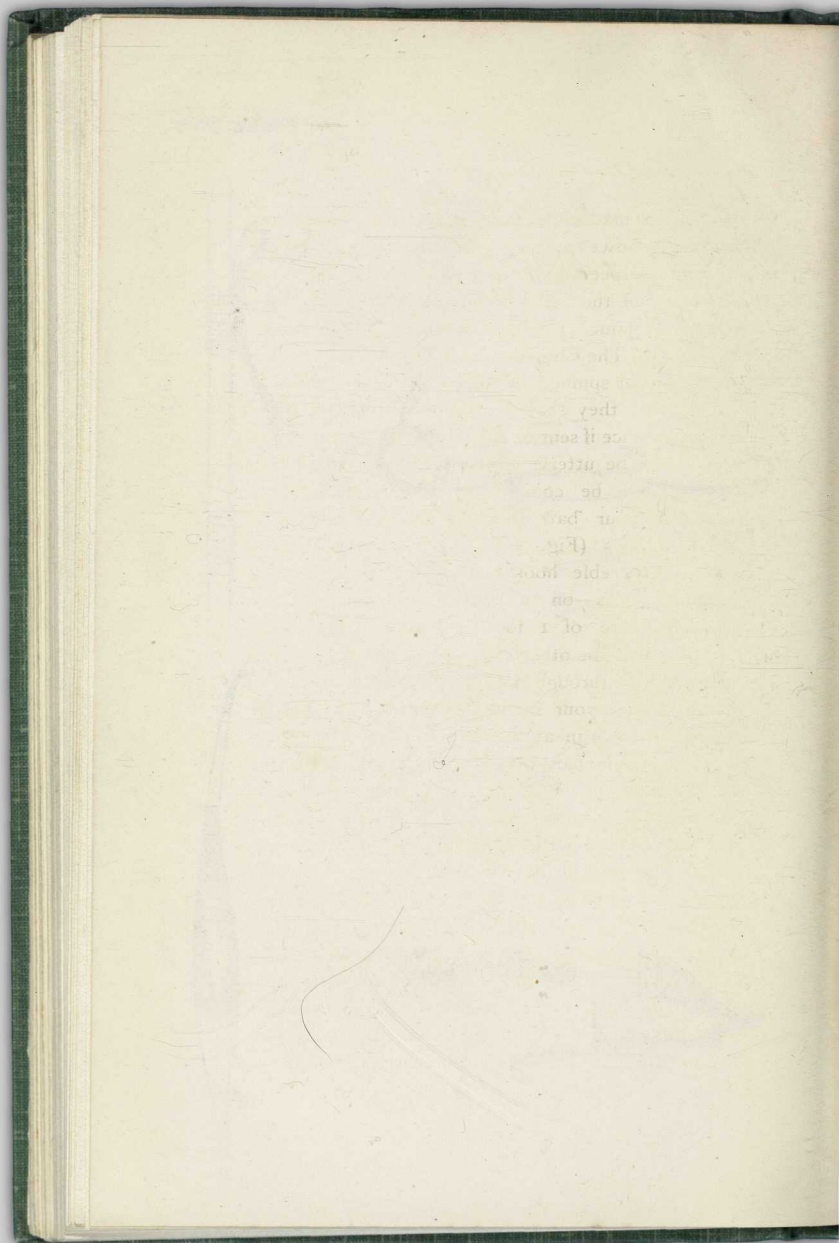


Fig. 4.



of spinners made, that most people have their own favourites, however if a beginner wants recommending to any especially, I think that I may safely say that none of the three following will in any way disappoint him. (1) The Crocodile (Plate XXV, Fig. 1). (2) The Chapman. (3) The Archer. When ordering your spinners out from home, remember to specify that they shall be especially mounted for Mahseer, since if sent out as ordinarily mounted, the hooks will be utterly useless for most Indian fish. If you will be content to take a little time mounting your bait, a neat and effective way is as follows. (Fig. 3, Plate XXIV): Take a good-sized treble hook and mount it by binding without knots—on a snood of stout gut or Hercules wire of 1 foot in length. Make the usual loop at the other end, also by binding. Then ship the loop through the eye of a baiting needle, so that you have your snood threaded on the needle. Pass the needle in at the anus and out through the mouth of your bait, and draw the collar through carefully till you have the shank and one point of the treble hook embedded in the fish. Then remove the needle and with a needle and black cotton, which you should have handy, sew up the bait's mouth. And when the fish are *very* shy and canny, I often use a large single hook with a small eye. Mount this neatly with a single strand of Killin wire. Then having laid the shank of your hook along the small fish to measure so that the eye of hook shall come in bait's mouth, mark just where the baiting needle is to enter. Then thread



the fish on to your mount, you will find that the hook goes in easily enough with a little humouring. Now the eye of hook should be in the bait's mouth. Sew up the mouth passing the thread through eye of hook at the same time. Then tie a piece of stout white cotton round the body just where the bend of hook emerges; cut off all ends, and you have a small bait mounted about as neatly as it is possible to mount one. And while on the subject of mounts, Messrs. Luscombe of Allahabad have patented an exceedingly neat Chilwa tackle, full particulars of which can be found in their catalogue.

If you want to fish deep you must weight your bait. The best way of doing this is to use a minnow mouth lead. Failing one of these, put as much lead as possible in the bait's mouth, and sew it up. If more weight than this is necessary, you must lead your line at 18 inches or 2 feet away from the bait, but the disadvantage of this is that it makes it more difficult to cast neatly and effectively. When using a bait mounted like this it is an advantage to have a buckle swivel at the end of one's trace.

A good live-bait flight, a rough imitation of Parsons' (as mentioned in the Chapter on Mahseer), is made as follows (Fig. 3, Plate XXII): mount a single hook on a stout collar of gut 2 feet long. Then prepare your lip hook. Take an eyed hook and bind with waxed silk a very small loop of wire or gut on the shank, so fixed as to lie on the back of the shank, away from and opposite the bait.

Then take your collar with the mounted hook

and pass the free end through the loop on lip-hook, take two turns round the shank of lip-hook and then pass out through the eye. Finish off your collar with a loop as in an ordinary collar. Now you will find by a little manipulation you can move the lip-hook up or down, though it will not slip from any direct strain. Fix your body-hook first, as per illustration, and then having adjusted your lip-hook so that the bait will not be curved, pass the bait gently through the upper lip of your bait. And your flight is ready for use.

This way of mounting is however only suitable for baits of fair size, for small fish a hook passed through the skin of back—as laid down for Megalops—is better. The Jardine Patent live-bait tackle, if especially mounted for Mahseer is excellent in every way, and is perhaps the simplest of all to use. The illustration, Fig. 3, Plate XXV, sufficiently explains itself, and also its use is explained in Chapter III under live-baiting for Mahseer.

#### GAFF.

Now a gaff is not very often needed in India. For remarks on the use of one, see also the next Chapter. However if you have one you will often find it useful as a stick when wading, or when walking over rocky ground. In that case have a good solid shaft 5 or 6 feet long, and either have a protector or a fair sized cork over the point. Also a gaff occasionally comes in useful if your spoon gets caught in a snag in fairly shallow water. There are numberless gaffs on the market, teles-

copic and otherwise, but in this country a good stout shaft with a sharp strong hook is all you want. The handle can be made hollow to hold a spare top; this is useful sometimes, but with much wading the spare top stands a chance of becoming warped; while the shaft cannot be so strong as if made of solid bamboo.

#### LANDING NET.

One does not see landing nets used in this country as much as they might be. There is no doubt that they are exceeding useful things, and many a fish that gets away might have been saved if one had used a good strong landing net. If you get a landing net, it is best to get a large and powerful one, the biggest salmon net, since it is better to have too big a net for your small fish, than too small a net for your big one. Certainly it is better with a Mahseer to run him on to a shelving beach if one is handy, but often one is fishing from a boat or a rocky bank, and there are no real facilities for bringing your fish into shallow water, and then a net is useful. And there must be few men who can say they have *never* lost a fish through a bungle in landing him. I remember one nice Mahseer of about 30 lbs., that was hooked and brought right up to the bank, at the only place possible which was a small rocky bay with about 8 inches of water; on he came with his head right out of water on to the bank, then the shikarri made a bungle in landing him, and he gave a plunge, the trace catching a sharp corner of rock parted, and then a large fish splash-



ing furiously, and three frantic men grabbing a slippery side, the end—a vision of a gleaming silvery flank slowly and wearily rolling away out into the stream. One's feelings on such an occasion are indescribable. With regard to how a net should be used I must refer you to the next Chapter.

#### LIVE-BAIT KETTLE.

Now a special kettle for one's live-bait is really rather an unnecessary luxury in this country, since the common chatty fulfils all requirements so well. Still a nice bait kettle has good points which the chatty lacks, so that if you can afford it get one by all means. There are numerous kinds on the market; a very nice one is the "Field" bait kettle which has a small bellows in the handle to enable one to aerate water at will. Also inner perforated can takes out and can be placed in the stream or tank. Three advantages a good bait kettle possesses over the humble yet homely chatty. (1) It is more portable and less breakable. (2) The water can be better aerated. And (3) you can select and pick out the little fish you want easily, also can see and throw away the dead ones, without an attendant having to glope about with his hand in hidden depths, only to inform you suddenly that there are no more live-fish left!!

#### CASTING NET.

And a casting net is sometimes a useful thing to have with one, only if you do carry one about it is as well to know how to throw it oneself. Since if

you want bait in any spot so out of the way, that local fishermen with nets are not to be met with, then you can hardly expect to find skilled casters there either. A net can usually be picked up from some native fisherman for a couple of Rupees or so, and you should get him to give you a few lessons. They look so delightfully easy to throw, but for all that you will find that you will tie yourself and the net into some awful knots before you are much good at it. It was many a long day before I made my first capture, and that was only a frog, who croaked derisively at my look of disgust, as I strove to disentangle him from the wet and slimy meshes.

#### DISGORGER.

This is a most useful implement, in fact it is almost a necessity, especially when one wishes to extract a hook, well fixed in the mouth of one of the siluridae. A good one can be bought separate, the best idea however is to have a disgorging in one's knife.

#### KNOTS.

Perhaps the most generally useful knot for fastening the running line to trace or cast is as shown in Fig. 2, Plate XXIV. Still some prefer the plain knot without the bow, this however generally means cutting the line to undo after fishing.

#### OUTFIT.

And now as to what outfit may be recommended to a beginner. This is a *most* difficult question

since so many factors come into play. The beginner may be a soldier who will probably travel all over India, getting all sorts and conditions of fishing ; or he may be a business man tied to one of the great cities like Bombay or Madras ; in any case I will assume that he is not a rich man, since if a man has money enough to set himself up regardless of expense, you may be sure that he has been able to buy his experience long before this humble volume would fall in his way. Still again to the poor man I would say—Buy *good* tackle, the best that you can afford, as cheap articles in fishing spell disaster more surely, than in almost any other form of sport. The prices I will take from a well-known English tackle maker's catalogue—Messrs. Hardy Bros.—I hold no brief for them, but in common fairness I take from their list ; as, though I have dealt with them for a long time, never yet have they disappointed me, nor have one of their articles failed me in use, and that is a testimonial that one can seldom give now-a-days unfortunately, in this age of haste and bustle. I only give a small estimate, enough to commence with, as nothing grows with experience so quick as a man's stock of fishing tackle.

|                                                                                                            | £           | s.  | d.    |
|------------------------------------------------------------------------------------------------------------|-------------|-----|-------|
| 1. One 14 feet greenheart rod, 2 fly tops and 1 shorter top for Mahseer, Carnatic Carp, etc. Best quality, | about       | ... | 3 5 0 |
| 2. One 10 feet greenheart fly rod, 2 tops, for lesser flytakers                                            | ...         | ... | 1 1 1 |
| 3. One 10-11 feet rod, for bottom fishing,                                                                 | £ 0-15-0 to |     | 1 0 0 |



|                                                                                                                      | £ | s. | d. |
|----------------------------------------------------------------------------------------------------------------------|---|----|----|
| A. One 4½ inches metal reel (a Silex costing 45/- is a perfect joy if one can afford it),<br>for rod No. 1 ... ..    | 1 | 10 | 0  |
| B. One 2½ inches metal reel, for rods 2 and 3.                                                                       | 0 | 12 | 6  |
| 40 yards Manchester spinning line, sign 64,<br>spliced to 80—100 yards strong backing<br>line, for reel A, about ... | 0 | 15 | 0  |
| 40 yards trout line, for reel B, „ ...                                                                               | 0 | 6  | 0  |
| 40 yards Manchester line, sign 84, or<br>40 yards Tussa line, for bottom fishing,<br>about                           | 0 | 6  | 0  |
| 4 two inches gilt and silver spoons,<br>with flying mounts ... each                                                  | 0 | 2  | 3  |
| 4 one-and-a-half-inch gilt and silver<br>spoons, with flying mounts ... each                                         | 0 | 1  | 9  |
| 4 one inch ditto „                                                                                                   | 0 | 1  | 6  |

N.B.—These could be made up according to directions given elsewhere in this book, for considerably less than one half the above prices.

|                                                                                                             | £ | s. | d. |
|-------------------------------------------------------------------------------------------------------------|---|----|----|
| 4 traces (No. 2) Hercules wire, or 4<br>medium Punjab wire traces, each                                     | 0 | 1  | 6  |
| 2 medium salmon gut traces, each<br>£0-2-0 to                                                               | 0 | 3  | 0  |
| 3 „ „ „ casts, ditto                                                                                        |   |    |    |
| 3 fine trout gut casts, each £0-0-6 to                                                                      | 0 | 1  | 0  |
| 6 Blackamoor flies, on Nos. 5 and 6<br>Limerick hooks, dozen £0-5-0 to                                      | 0 | 8  | 0  |
| 1 dozen assorted midget flies, dark<br>colours dozen                                                        | 0 | 1  | 6  |
| 4 crocodile spinners, assorted sizes, for<br>spinning natural baits, mounted for<br>Masheer, each £0-2-0 to | 0 | 2  | 9  |

|                                                                | £ | s. | d. |
|----------------------------------------------------------------|---|----|----|
| 1 dozen eyed treble hooks, assorted sizes,<br>say — 6, 8, 10's | 0 | 2  | 0  |
| 1 dozen eyed Limericks, assorted sizes.                        | 0 | 4  | 0  |
| 1 dozen swivels, German silver, mostly<br>No. 5's ... ..       | 0 | 1  | 0  |
| 1 good fisherman's knife with disgorgers,<br>£0-5-0 to         | 1 | 0  | 0  |
| 1 pair pliers with wire cutter, say ...                        | 0 | 1  | 6  |
| 1 spring balance, weighing up to 30 lbs.,<br>about             | 0 | 4  | 6  |
| 1 dozen assorted Simplex leads, ..                             | 0 | 0  | 9  |
| 2 Nottingham floats ... ..                                     | 0 | 1  | 0  |
| 2 Detective floats ... ..                                      | 0 | 1  | 0  |
| 1 good stout gaff ... £0-5-0 to                                | 0 | 10 | 0  |
| 1 good collapsible salmon net, £0-10-6 to                      | 2 | 5  | 0  |
| 1 fly book ... .. £0-5-0 to                                    | 0 | 10 | 0  |
| 1 tin box for tackle ... .. £0-7-0 to                          | 0 | 10 | 0  |

Now of the articles mentioned above, some could be cut out altogether by the beginner, such as net and gaff; others could be got cheaper if desired; second quality goods if got from a reliable maker, will generally quite suffice for the beginner, only that if a man is keen on fishing he may as well start with the best if he can afford it, since if careful of his tackle it will last and satisfy him when he is no longer a novice; whereas if he had not got the best at first, he would soon begin to hanker after the more perfect articles, as his experience becomes enlarged. Needless to say, every novice has to buy his experience, sometimes dearly if no kind mentor is at hand to help and advise. He may arrive with his stock of tackle at some river where the Carnatic

carp are taking freely, and lose all his six flies in one afternoon, and then how he will bemoan his fate that he had not brought two dozen; or again he may commence in one of those extra snaggy little rivers of the Western Ghauts, and lose all his traces in two days. These things do happen. But perseverance is necessary, *festina lente*, buy here, make up there, and the day will come when you may sally forth for a 2 months' fishing trip, assured that you can tackle all and every fish you may meet, and that your supply of tackle will equal the demand.

#### REQUISITES.

If going on a trip, or anywhere away from the shops, you will find all or any of the following things useful:—

Cobbler's wax.

Thin silk for fine work in whipping and binding.

Stout silk for repairs to rods, etc.

Some copper wire.

A bottle of shellac varnish (thin).

One or two good pairs of pliers (with wire cutter combined).

A good pair of scissors.

A small tube (oil) of red paint for floats, etc.

A piece of emery paper.

Some brass wire (one or two coils of varying thickness).

A good knife with disgorgers, fly tying pliers, scissors, etc.

Several spare hooks of assorted sizes.

Several swivels.



Several snake rings, or best of all "Bridge" rings.

Spare baiting needles.

Some ordinary needles.

A reel of cotton.

A small quantity of mercury, and a couple of lemons (for use as mentioned later on).

Did I mention how much line you should have on your reel? I believe I did. anyhow here it is again.

Generally, if you do not expect fish of over 10 lbs., 75 yards should be enough, but have 100 yards to be safe. This allows of spinning from a boat with 50 yards out, and plenty to spare if the fish rushes down the pool. In any case 150 yards should be enough for any fish. He must be a monster, or the water very much against you, if you cannot stop or turn a fish with that amount on your reel.

Should he run out all your line lower your point and hold on, its the final tug; he may break you, if he doesn't the probability is then that he will be yours.

Personally I would advise you to order your tackle out from home, as it comes far cheaper in the end. Deal with some good shop and stick to it. It is perhaps invidious to say any are better than others. One whom I deal with and have always found satisfactory is—

Hardy Bros., of Alnwick.

But

Farlow, The Strand.

Carter & Co., Islington.

Little, of Haymarket.

Alcock, of Redditch.

Mallock, of Perth.

A. & N. Co. Society, Limited.

are all well known shops.

Out in this country there are several shops who supply tackle; notably—

Luscombe, of Allahabad.

Manton, of Calcutta.

Oakes & Co., Ltd., of Madras.

Scott, of Pindi.

Biswas, of Calcutta (now called Calcutta Armoury Company).

Rodda, of Calcutta.

Murray, of Naini Tal.

Treacher, of Bombay, and

A. & N. Co. Society, Ltd., Bombay.

And remember always buy *good* tackle, it does *not* pay buying cheap hooks, swivels, gut, etc. If you really fish to catch fish, it is worth doing the thing well.

#### TACKLE BOX.

And a useful thing to have is a good box, made up according to any design that you may fancy, to hold *all* your tackle—in fact everything you possess in the fishing line, except of course your rods—and for them you should have a separate box made of wood, or of canvas or leather like a gun case. Have your tackle box made amply big, with divisions for reels, flights, spoons, casts, phantoms, leads, floats, repairing outfit, etc., have a place for everything and everything in its place;

and you will find that a small initial cost and trouble will well repay you after, in saving your tackle from the inevitable deterioration that sets in, when tackle is all bunched up together, here, there and everywhere in odd places. It is so useful too on a trip, you know exactly where everything is, and can lay your hand on anything at a minute's notice. An excellent tip of Mr. Thomas' which I always follow, is to have a compartment labelled "Sick," and into this goes every spoon, fly, cast or other tackle, that shows the least sign of wear, all to be tinkered up again at leisure when the trip is over.

And a last piece of advice I would impress on you. It is good advice, not the sort you listen to and agree with and mean to ignore all the time. No you will fully intend to carry out this advice, but at first you will find it *very* hard despite the best intentions. It is to see at home that all your tackle is *quite* up to the mark. Test everything; line, traces, casts and snoods on spoons and flies. How often after a good soaking, I have tested a nice looking gut cast, and it has broken then I mended it and it has gone again somewhere; once more mended and tested and passed as fit. After each mend you will find yourself testing it more gently, kinder sorter praying that it will hold *this* time, but you *must* test it fairly, it's better to go on breaking, breaking at home though it breaks your heart, than to see perhaps your one rise of the afternoon, taking away one of your best salmon flies to its lair, to say nothing of his warning all the other fishes, that fly diet is unwholesome for the day.



## CHAPTER XV.

### USEFUL HINTS.

**A** MAKESHIFT running ring for the top of your rod can be made of a good stout piece of brass wire. Take two turns round a pencil, and cut off the ends level, and there you have your ring.

Occasionally if you have had bad luck you may find yourself running out of spoons, and will then have to make up some as best you can out of materials available. Do not use all the spoons out of your tiffin basket, as one man did. He caught something besides fish when he got home, and his wife found out. Hammer them out of any piece of tin or brass available, and then silver them over. This you can do very well for temporary use by means of the quicksilver and lemon mentioned before. You can buy the former in most bazaars in India; it is generally sold in a small nut shell, the hole stopped up with wax.

Squeeze a few drops of lemon into a saucer and then pour in a small amount of mercury. Wet the spoon with lemon juice, and rub in mercury with your finger till it "takes." Make as thick a coating as you like, and then dry the spoon on a piece of rag and polish with chamois leather. This is an excellent makeshift in the way of silverplating,

only it tarnishes and wears off after a time. Remember when you are using mercury to remove any gold ring you may be wearing, as mercury tarnishes gold.

To prevent hooks, etc., rusting, a good plan is to dip them into thin shellac varnish, and then hang them on a string to dry.

To preserve flies, when put by; keep in a tin box with naphthaline, camphor or other strong disinfectant.

To keep gut, when put by; wrap in wash-leather and put in a tin box. When taking it into use again, if the gut has been put by a long time, do not suddenly plunge it into water to soak it, but let it get soft gradually between the folds of a damp cloth.

Always hang your rods up on a dry wall in their covers in preference to leaving them about leaning in corners. Do not tie the covers up too tightly.

See that your reel runs freely, and that the screws are all tight before starting fishing.

To use your landing net, place a small stone in it to sink the bag, and when you have got the fish in it do not try to lift him out or you will strain your ring. Pull him up with the handle more or less perpendicular.

*The Gaff.*—How to use a gaff? is a question some novices may ask. You will very seldom want a gaff with Mahseer. It is much better if you can play your fish into shallow water, to let one of your attendants get behind the fish and lift him out by the gills. But there may be occasions, such as playing a big fish from a boat, when you must use a gaff. In a case of this sort remember that a Mahseer's scales make him like an armour-plated cruiser, and that if you try to gaff him in the side, in nine cases out of ten the point will fail to penetrate. Get the gaff well below and under him (in the case of a Mahseer) and with a sharp jerk, pull it into the fish's belly. In the case of other fish—not carps—put the gaff over (or under) as preferred and jerk it into him. If put over in the case of the carps, the point is more likely to catch a scale than if put under.

In walking with your rod put together remember always to have the butt to the front (except going through jungle), if you then trip and fall, your rod may escape damage. If carrying it the other way, your top is almost certain to go to glory.

Should you find that your rod joints have stuck, when you come to take the rod apart, do not try to force them; generally by warming over a flame for a minute or two, they will come apart. And remember that the joints should always be kept greased—tallow or common suet is a good thing, vaseline has a tendency to oxidise.



If you catch a tree, or a rock in the river, lower your rod and pull from the reel; if something has to go, better a hook or your collar than the rod top. Don't try switching with the rod, the strain put on the top is immense.

And occasionally when you have on a good-sized fish, he will adopt the exceedingly annoying manœuvre of sulking. Then the question is, what's to be done? Should the water be shallow enough and the current not too swift, it is sometimes possible for your attendant—if clever—to wade in and dislodge the fish with the gaff handle. But generally this plan is not feasible, and you must fall back on heaving in rocks, cussing and the following dodge. Take any stone weighing a few ounces, and tie a piece of cord tightly round it (a conical bullet is a good thing to use if you have one with you) leaving the two ends of your cord fairly long. Then get some one to hold your rod and keep the strain on, while you tie the ends of the cord in a loop round the running line, and start the weight off so that it runs down the line and trace on to the fish's nose. Very often this will rouse him.

*Splicing Lines.*—Many men think that if they break or cut their running line they have spoilt it altogether. But you can splice it just as strong as it was before, as follows: Carefully unpick with a pin the last  $\frac{1}{2}$ -inch of both ends. Brush the strands out fine. Then wet and roll the strands with your finger so that there are two  $\frac{1}{2}$ -inch points to each

end. Place the 4 points together—the illustration (Fig. 3, Plate XXIV) will explain better than words—roll neatly, and then bind tightly with well-waxed silk, and finally put a coat of varnish on.

*Line Dressing.*—Take 2 pints linseed oil,  $\frac{1}{2}$  lb. of beeswax and 2 oz. of India-rubber cut up fine.

Boil this mixture, stir well, and allow to cool slightly. It smells!! When still warm, place your line in it to soak for some time. Then take out and pull it through your fingers, carefully taking off all surplus oil. Then hang out to dry. This drying will take at least a fortnight, so you must dress your lines at some time when you will not need to use them. Keep the mixture for future use in a tightly-stoppered bottle. This mixture is also very useful for touching up canvas boats if they leak. Brush it on well with a fair-sized brush. If there is any hurry for your line or boat, you can add a certain proportion of “litharge” (say 12 ozs.) to the above mixture; this makes it dry very quickly.

Another line dressing is as follows:—Take half a pint boiled linseed oil, and half a pint Copal varnish. Mix well, then soak line thoroughly. Take out and remove surplus dressing with a dry cloth. When quite dry repeat the operation.

Now you will find that passing the line through your fingers to take off the surplus dressing is an exceeding messy job, so here is a plan you may find worth adopting. Take a fair-sized tin, say a big jam tin, and put your line to be waterproofed

in this nicely arranged in coils. Near the top of the tin make neatly a small round hole, just large enough for the line to pass through and no larger. Now pull through about one foot of line. Then pour in your mixture, taking care not to let it reach quite up to the hole. After it has soaked sufficiently make one of your servants hold the tin tightly with one hand, and with the other let him humour the line immersed in the mixture so that it uncoils evenly. Yourself take hold of the one foot of clean line and start drawing the line from the tin, its passage through the small hole will take off all surplus dressing far more neatly than you could yourself do it with your fingers. Then fasten the line between two trees, or on a large wooden framework to dry.

If float-fishing, you will very often find that there is too much wind for you to see your float. The natives have a very neat way of getting over this difficulty, and one which we can adapt to our rods and lines as follows: Take a very thin length of bamboo 3 feet long, and at the thicker end bind on a small snake ring, or a loop, as on the detective float.

Then fix up your rod and line as for ordinary fishing and lay it beside you on the bank. Before fastening the gut cast to running line, however, pass the end through the loop on bamboo, and then tie as usual. Leave your rod lying on the bank, and take the thin bamboo as if it was a small rod, and having plumbed the depth carefully so that the



bait just rests on the bottom, take two turns of the gut round the very fine end of bamboo, and with your finger hold the gut steady where it passes through the loop at the thicker end. You are now holding your float,—or rather its equivalent—in your hand.

Watch the very fine point of the bamboo, and by any jerks or twitches it receives you will know of bites below. Strike hard, and with the whole arm. The fine bamboo will only bend not break. If you get into a fish, let go your bamboo, and take up your rod to play him. The two turns which you took with the gut round the bamboo point will unwind themselves, and the loop on the other end being large enough for the gut to pass through freely the bamboo will slip down and not interfere with the reeling in of the fish. This method of fishing is only recommended when the waves are such as to make float-fishing quite hopeless.

Paste-baits—not mentioned in Chapter IX. For larger Carps; Atta (flour) well mixed up with Huldi (Turmeric); or Atta well mixed with grated cheese. Or again as follows:—Take some rice with the husks on and pound up fine, then stir in a saucepan with one tablespoonful of ghee, and heat; when nicely scented take out and mix with some ground-nut, which should have been first roasted and well pounded up.

And another paste-bait, which I think is almost my favourite for Mahseer or any kind of Carp in coloured water. It was taught me by a most

sporting Lance-Corporal, and is simple, clean and smells all powerfully. Flour and bran well pounded together into a paste and strongly scented with aniseed. Cotton wool or not according to taste.

*Ground-bait.*—In all float-fishing one of the simplest and best ground-baits to use is "Bran." Soak a little till thoroughly wet, and then throw it around your float. It will sink immediately. Another good bait is as follows:—Fry some khulli or oil-cake till nicely scented, and then mix with bran. In rainy season, when using worms as bait, use chopped up worms and bran as ground bait.

If you are hard up for gut; buy some of the Bairy fibre (called Tungos in South India) which the native fishermen use. It is very cheap and very strong, and seems less easily cut through than gut. It is extremely brittle, however, when dry, and wants to be soaked for several hours before knotting or bending it.

To preserve dead baits; there are times that you may require to do this, knowing that at the place you intend to visit, there is generally a difficulty in procuring natural baits. For this purpose the following solutions are recommended: (1) Strong salt and water; (2) Methylated spirits; (3) Acetic acid—1 part acid, 2 parts water; (4) Formalin—a 2 % solution, *i.e.*, 1 part formalin, 49 parts water. Now of the above; as far as my experience goes, (4) is quite the best. No. (1) is

only temporarily effective; while No. (3) utterly disappointed me. But for those within reach of a Chemist, I will give an excellent preparation. Formalin—1 oz. Glycerine—5 oz. Rectified spirit—5 oz. Distilled water—9 oz. The above was kindly worked out for me by an interested doctor, and is quite the best preserving solution that I have come across. It keeps the baits tough and not too hard, preserves the colours and has not too strong an odour.

By the way the 2 % solution of formalin is a good thing to use to keep meat fresh in hot weather. Just brush the raw meat over with solution, and it will remain fresh for a much longer period than otherwise.

Some men say that it is a pity fishes don't give trophies, like horns, claws, etc. Well, you can get one or two trophies from big fish.

The gill plates of a large Mahseer can be made up into Menu-cards, or memo. tablets, as pencil marks on them will wash off quite easily.

Then the scales. Take several, immerse in boiling water, and clean well. They make excellent "name cards" for a dinner party; if slightly stained with red ink, the result is rather like a piece of pink mother-o'-pearl. The natives also use the scales of big Mahseer, as playing cards, in some part of India.

The large teeth in the throats of bigger Carp make quaint paper-weights, etc.

Cut off the tails of big fish, pin out till dry, varnish well and mount on a board, and they make



quite nice trophies to remind you of by-gone battles. This sounds all right, but you'll find you'll never do it!

Or stuff a fish. This is rather a business, and I would refer you to the instructions laid down in that excellent book "The Rod in India."

To clean the teeth and gill plates,—boil them in water.

And keep a diary on your trips, both fishing and shooting. It is always interesting to refer to, and it is a pleasure to write up after a real good day; while, after a real bad day, well, there is nothing to write. The following form is recommended:—

| Date. | River.   | Place.     | Actual spot.            | Fish.          | lbs. | Bait used.         | Remarks.                                                                      |
|-------|----------|------------|-------------------------|----------------|------|--------------------|-------------------------------------------------------------------------------|
| 1902  |          |            |                         |                |      |                    |                                                                               |
| 18-3  | Poonch.  | Tangrot.   | Jungoo Pool.            | Mahseer.       | 7    | 2" gilt spoon      | Weather cloudy,                                                               |
|       |          |            |                         | "              | 14   | natural bait.      | river fairly high.                                                            |
|       |          |            |                         | "              | 3    | " "                | " "                                                                           |
| ..    | ..       | ..         | ..                      | ..             | ..   | ..                 | ..                                                                            |
| 1904  |          |            | Re a c h above bungalow | Mahseer.       | 29   | Natural bait.      | River low & clear, had no boat so                                             |
| 17-4  |          |            |                         | "              | 8    | " "                | fished from bank and by wading.                                               |
|       |          |            |                         | "              | 6    | Phantom            |                                                                               |
|       |          |            |                         | "              | 17   | G.S. Spoon 2"      | On 18th a heavy thunderstorm breaking, the river became unfishable till 23rd. |
| 18-4  | Cubhany. | Kakankola. | 2 miles up stream.      | Carnatic carp. | 4    | Alexandra Fly.     |                                                                               |
| 23-4  |          |            |                         |                | 3    | Live grass-hopper. |                                                                               |
| ..    |          |            | ..                      | ..             | ..   | ..                 | ..                                                                            |

In the Remarks column enter any details that may be of interest, such as weather, state of water, time he took to land, male or female, etc., etc.

At the end of the book are a few pages ruled for diary, etc., which may be found useful.

And if you are a keen sportsman may I recommend you one more form of diary to keep? To save you trouble there are a few ruled pages at the end of this book. The form is as given below, and is for the purpose of noting down any information one may hear about different spots. It often comes in useful, not only to remind oneself of good places, but to tell one's friends that are going to new stations that such and such a place is worth trying; and it also helps to improve one's knowledge of the geography of India!!

| Place.    | How got at                     | On whose authority. | Sport to be had.                              | Remarks.                                          |
|-----------|--------------------------------|---------------------|-----------------------------------------------|---------------------------------------------------|
| Kakankota | Mysore station by road.        | So & So's.          | Elephant, Bison, Sambhur; & Mahseer in river. | Hot weather good time; also November for fishing. |
| on        | to Chettanahalli, B. 10 Miles. |                     |                                               |                                                   |
| Cubbany   | to Hampapur, B. 9 Miles.       |                     |                                               |                                                   |
| river.    | to Antesunte, B. 16 Miles.     |                     |                                               |                                                   |
|           | to Kakankota, B. 13 Miles.     |                     |                                               |                                                   |
|           | Total 48 Miles                 |                     |                                               |                                                   |
| ..        | ..                             | ..                  | ..                                            | ..                                                |

For weighing fish a Salter's spring balance is useful, and some fishing knives have spring balances weighing up to 20 lbs. fitted in them. Say, you catch a 30-lb. fish and have a balance only weighing to 20 lbs. Take the handle of your gaff or landing net, and having passed a stout cord through the gills of your fish, hang him exactly in the middle of the stick. Make two loops of string, and fasten at each end of stick, make an attendant hold up one loop, and lift other with your balance. Double what it shows. In this case with a 30-lb. fish, it would read 15 lbs.

Say that you get a 50-lb. fish, and have only a 20-lb. spring balance or a 20-lb. fish with a 7-lb. balance; I have known men rack their brains over what they would do in such a case. There *is* a way of surmounting the difficulty. Cut the fish in half, and weigh the two halves!! You must calculate what weight you lose in loss of blood. Also one last method that is generally fairly accurate with Mahseer. If you have absolutely no means of weighing your fish, use the following formula:—

Length plus  $\frac{1}{3}$  length  $\times$  by girth squared  $\div$  by 1,000 = weight lbs., *i.e.*, a fish 30" long, with girth of 20" would weigh as follows:— $30 + 10 \times 20^2 \div 1,000 = \frac{40 \times 400}{1000} = 16$  lbs.

And a word as to packing fish. It may occasionally happen that your fishing grounds lie within fairly easy reach by rail or road of your station, and



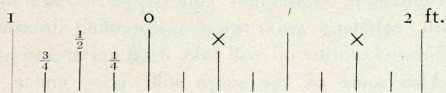
you may like to send in your fish to friends, or the mess. As soon as the fish is caught, it should be killed and then disembowelled and cleaned out with dry grass (water should not be used). Then sprinkle charcoal and salt inside and pack the fish carefully in long grass, keeping it in the shade till it can be sent off.

As to the time of year to fish. This so much depends on the river, its locality, etc. In the North one may take it that October, November; and then March and April are the best general months, though some rivers give good sport in January, February and December.

In South India from the end of September to the end of April. All these months are good for fishing, except just during December or January rains, but these are uncertain, so you must chance them; also it is a curious fact that in several South Indian rivers, the fish will not take, during the middle of the cold weather, especially is this noticeable when the wind is from the East. I have heard of places good for Mahseer in South India even in July and August, but they are difficult to get at and you must make up your mind to continuous rain. But as I said before so much depends on the locality of the river. Some of the big Southern rivers, like the Cauvery are not fishable sometimes till after Christmas;—1903 was a year for instance when the Cauvery, Cubbany and many other eastward flowing rivers never cleared properly till well on in January 1904. Then the rivers of South India flowing westward down

the Ghauts are in good condition very soon after the cessation of the monsoon, some of them early in September, though they are frequently temporarily discoloured by thunderstorms among the hills. By Christmas time some of them are so low, as to be hardly worth fishing except in the pools. As regards tank-angling the best time is supposed to be the hot weather and the rains, though fish like murrel and lots of the smaller fry appear to take impartially at any time of year.

A good idea is to cut in a scale as follows on your gaff or landing net handle. It comes in useful for measuring fish.



And just a word as to your boots. If you get them very wet do not let your servants put them in the sun to dry, just as they are, or they will get hard and crack. But have mutton fat or other grease well rubbed in, and then put in the sun, when they will dry nice and soft. Crude castor oil is also a good thing to use, and it is cheap and generally procurable in this country.

Also if cheap boots are required for shooting or fishing, very good patterns are the "Sepoy's" or "Sowar's" boots, turned out by two or three firms in this country. A good plan to adopt with these boots, and one that I have always found

answer well, is when new to soak them for two days in water, then removing them rub in crude castor oil freely till the boots are well saturated, after which put in the sun to dry. This makes the leather soft and pliable, a great consideration if one does much wading.

When buying shikar cloth, or flannel for shirting, to be made up by a dirzi; it is a good plan before handing the material to him, to soak it well for a couple of days in water. This allows the unavoidable shrinking to take place, before and not after the garments have been made.

Remember if you get your hands very stained with cobbler's wax or water-proofing mixture; ordinary kerosine oil will take it off quite easily.

Also some of the soaps sold now under the heading of "Motor sundries" are excellent for removing grease, etc., from one's hands. "Lasso" soap is a good article.

To dye gut; often anglers have preferences in the colour of their gut. It can be dyed as follows: To make it a blue colour,—moisten the gut in warm water, and then soak in a mixture of blue-black ink and water. To get a brown tinge,—soak in coffee lees or strong tea. The depth of colour required in either case may be obtained both by strength of mixture, or time given for soaking.

When fishing occasionally examine your gut or wire snood carefully. Especially do so in the latter



case if using Hercules wire, as sometimes the strands will give just above the binding on to the spoon swivel, and if you continue to use that amount, the spoon suddenly disappears.

To start and finish off any binding. In starting lay one end of the waxed thread (or silk) along the object to be bound, and take half-a-dozen turns over it. Then cut off end. To finish binding, take a piece of brass or copper wire, and form a small loop which lay alongside the object to be bound, and take the last half-dozen turns over this, then put free end through loop, pull the two ends of wire till loop and free end come through, draw tight and cut off neatly. The illustration, Fig. 4, Plate XXV, explains both these methods better than words can do.

Most men know how to splice a broken rod I fancy anyhow here is a hint or two for the novice. Cut and smooth the two broken ends till they lie flat against each other.

If the break is a clean one, and the broken pieces fit, do not think of cutting them in that case. Then get some strong fish glue and stick the two pieces together, binding them roughly but tightly with a piece of cord. Leave till dry. Then carefully remove the cord a little at a time and bind the fracture tightly with well-waxed thread, giving a good margin on both sides of the break. Finish off neatly and give a thick coat of varnish over all.

I have before laid stress on the great importance of drying one's line before putting it away. Occasionally, however, one may fish on till late, and then having a long ride or drive home, may not find it feasible to dry the line before starting. In that case a good idea is to have an old woollen sock or flannel bag in which to put one's reel; drop the reel in, and drawing off all the wet line, wind it round and round over the cloth cover.

To twist wire or gut. Take your two or three pieces of wire according as to whether you want trace double or treble and proceed as follows—(gut may be twisted the same way, but must be thoroughly soaked first). Say you wish to twist 3 strands of wire. Tie the 3 strands to 3 separate nails, the nails should stand well out from the wall. Take a piece of cardboard and cut 3 equidistant holes in it. Pass the 3 free ends of wire through the holes, and then tie the 3 loose ends together and fasten to them a fairly heavy weight. Now you are ready to begin. Get someone to twist the weight rapidly round, keeping it always moving the same way, and you yourself gradually raise your piece of cardboard (which should have been near the weight to commence) as the wires beneath it become twisted. This all sounds complicated, but let anyone try, and its simplicity will at once become apparent.

In most cases if you tell them to anneal your wire in the bazaar before sending it up they will do so, but often you may buy some in a hurry, or you find

what you have is not sufficiently pliable; in that case you can anneal it yourself as follows: Take your wire, whether brass or steel, and put in a hot fire, placing the coil so that the heat will be as uniform as possible over it. When the wire is thoroughly heated, take out and plunge into a basin of cold water. I have been told that the wire should be gradually cooled in ashes or earth; but I have tried both ways and the water-cooled wire has always seemed as strong, besides being if anything more pliable. Care must be taken that the wire does not get burnt away, as this will happen if the heat becomes too intense.

And just one last hint; nothing to do with fishing you'll say, but still it has to do with fishing trips, and it is such a useful tip that I must give it anyway. If going on a 10 days' trip, and you want to take fresh butter with you, do as follows: Soak clean muslin in a solution of borax and water, (roughly say 2 tablespoonfuls of borax to a tea-cupful of water) and then wrap up each pound of butter in a moist rag. Even in the hottest climate it keeps the butter beautifully fresh and hard.

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## CHAPTER XVI.

### LOCALITIES.

UNFORTUNATELY this chapter is not as comprehensive as I could wish, but we'll hope that it is better than nothing. Anyhow it gives the names of a certain number of places where there *are* fish, and should anyone decide to visit a locality mentioned herein, he will have a basis to start upon; and if he makes enquiries among his friends and acquaintances, will be sure to find someone who knows the spot personally, and who will be able to fill in any details he may wish to know. I hardly touch here on any places in Northern India, since anyone who intends fishing in those parts, could ask for no better guide than the Punjab Anglers' handbook. Perhaps the simplest method of giving localities for fishing will be to take rivers in turn, and starting at their sources to work down towards the mouth. Of course the places mentioned are not all, probably not one half, of the good places for fishing on the different rivers, they are only the places known to the author or told him by kind friends; and if any brother fishermen would supplement the list, it would be a kindly act and much appreciated. And one last word, on a matter that I approach with some diffidence. I know that I shall be blamed by some men for giving away pet places, and to them I would offer my best apologies.

But I will say this, that I have given away no other man's pet place that he has told me of, without leave; nor have I given away other men's pet places, that I have heard about, unless I have been to those spots, and they also have become pet places of mine. And I have honestly told of every place that I know of, and have not kept even one single pool back. So again I ask forgiveness. I do not think that any really good sportsman will blame me over much; fishing is so different from shooting; and while I would be the last to give away promiscuously any good jungle or forest reservē, rivers are hardly the same thing, seeing that after every monsoon the pools are almost entirely re-populated. Then the easily got at waters are already well known, and I do not think that the less accessible places will be hurt by a few more keen anglers knowing of them. (And it is only the keen sportsmen who would make pilgrimages to such places.) Their very inaccessibility will prevent their being overcrowded. And one more plea I would advance. The more fishermen there are out here and the more good waters become known, then so much the more will interest be aroused in Indian fisheries, and one more step will be advanced towards some sort of adequate protection for the rivers. For there is ample room in India for every rod angler, it is not the European sportsman who is to blame for the rapid diminution of fish in this country, but the poacher with nets, poison and dynamite who has had it for too long his own way. And then the more interest is aroused in fishing, the more chances of clubs being formed near big stations, and good fishing

assured within easy reach of large centres. But for the man who hates restrictions and wants to wander at will far from the haunts of man, fishing where he listeth, there will remain innumerable places in this vast peninsula, streams far away in the jungle and too ungetatable to be controlled by any clubs; and with such a man I must say that I am at one; it is one of the greatest charms of fishing in this country, the absolute sense of freedom that comes to one when wandering by some brawling torrent with the vast solitude of the jungle surrounding one. But all this is for one's leave, those delightful periods when one can get away to the right place at the right time; but also it is nice to think that when one's leave is up, one can still get a day or two occasionally with a rod somewhere in the vicinity of the station you are quartered in. Well I fear that I have been unnecessarily prolix. So to commence. Some of the places noted below, are also mentioned in the Punjab handbook and Rod in India; my reasons for again mentioning them (those that I do not know personally) is that my informants tell me that they are still good for fish; a guarantee that cannot unfortunately be given to all places at the present date, however excellent they were, even so short a time as 2 years ago.

#### THE CAUVERY.

Rises in Coorg and flows into the sea through the Tanjore District. The Huttur river, a tributary stream rising near Mercara joins the Cauvery close



to its source. Some very big fish have been taken out of this stream.

Fraserpet (bungalow) on the Cauvery, some good water here and lots of Carnatic Carp.

Dindanad, good for Carnatic Carp, is about 56 miles from Mysore, *via* Yelwall (B)\*9 miles, Bilikere (B) 16 miles, Hunsur (B) 28 miles, Periyapatna (B) 41 miles.

Ramnathpoor, 17 miles above Chinchincuttay (see below) good road. Fish Mahseer and Carp, there is a temple here where the fish are fed; fishing is not allowed in the vicinity of the temple itself, but no objection is made to fishing some distance either up or down stream.

Chinchincuttay, 29 miles along a good road from Mysore. Bullock carts available. There are bungalows at Yelwall 9 miles, Sagarkatte 15 miles, and Yedatore 21 miles from Mysore. At Chinchincuttay there is a very nice little 3rd class T. B. right on the hill overlooking the river. The Cauvery here is delightful.

Some  $\frac{1}{4}$  mile above the bungalow it runs a placid broad stream, then comes a bund, and for one mile follows a most perfect succession of rapids and pools, till lower down, the river again settles into the same broad stream. Just below the bungalow is an old temple, opposite which is a waterfall some 50 ft. high, with a grand pool and rapid below it, the most perfect looking water for Mahseer. Unfortunately when I went there, I had only 3 days' leave, and found the river hopelessly coloured by a heavy

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\* B—Bungalow of sorts.

thunderstorm. But I have heard of good bags having been made there and the natives assured me that there were big fish, which *must* be the case, since the Cauvery is full of fish both above and below this place, and such perfect water could hardly lack tenants. Chinchincuttay is also a practically deserted village, so is not likely to be much poached. Hardly any supplies to be got except from Yedatore 8 miles distant.

Some 12 miles below Chinchincuttay the Hemavutti joins the Cauvery from the north, and another 4 miles down the Lahtsmanthirtha runs in from the south. At Hunsur (T. B.) 28 miles from Mysore, on this latter stream I have heard of Carnatic Carp being caught, but do not know that the fishing is much good.

Seringapatam.—There is a convenient waiting room at the station, also a T. B. some 2 or 3 miles away. The station itself lies inside the fort, the Cauvery dividing into two channels here, and sweeping round on each side. The fishing seems indifferent though the water itself looks excellent in places. I have never heard of Mahseer being caught here, but have heard of good bags of carp being made, and have myself caught Carp up to 4 lbs. The river is I fancy very much poached to provide fish for the Mysore market, only some 10 miles away. There is a good run opposite a temple and below the railway bridge spanning the east branch of the river, and there are one or two good runs below the road bridge over the west branch and down near a house known I believe as "Scott's bungalow." Coracles can be

obtained here to fish from, and are necessary to reach the better rapids near the bungalow above mentioned.

Sivasamudram.—About 20 miles from Maddur station. Here are the Cauvery falls and some excellent Mahseer water. The difficulty is I am told to find the water clear. There are I believe some enormous fish below the falls. D. P. W. inspection bungalow here well fitted with furniture, crockery, servants, etc.; permission to occupy it must however be got from the Engineer-in-Charge of the Power Works. About 5 miles below the falls the Shamsha river runs in from the north, at the junction the water should be worth trying, and also the Shamsha river itself to where there is a waterfall some 3 miles up.

Then there are some falls that I should much like to try, or hear of some sportsman trying, but about the place I can get absolutely no information. The falls lie 12 miles down from Sivasamudram, and one mile below them the Arkavati river joins from the north. The best way to these falls would appear to be from Closapet railway station, to Kankanhalli (T. B.) 15 miles, thence to Kodihalli village 10 miles, and another 6 miles to Uyamballi village. This latter place is 6 miles again from the river, but whether falls are accessible from here I know not.

Hoginakal, better known by the name of Smoking Rock from the spray caused by 5 waterfalls made by the Cauvery here, where it runs through a gorge in the hills. It lies 46 miles from Morappur station on the Madras Railway. At Dharmapuri, 17 miles is a T. B.—in a chronic state of untidiness—and at Pen-



nagaram is a Forest hut, to occupy which permission should first be obtained from the D. F. O., Salem. Up to Pennagaram there is a good made road, from there onwards only a cart track, down the ghaut 10 miles to the river. At Hoginakal there is a chattram for Hindus and an old temple, nothing else; so that tents and all supplies must be taken with one. About a quarter of a mile down stream through the jungle, a rough track leads one to a clearing with some big trees, which forms a good spot for a camp. The scenery here is very fine, as the surrounding hills are all covered with jungle, and the whole Cauvery river runs—in the dry season—through a gorge some 12 ft. across and immensely deep. The fish are Mahseer, Carnatic and Malabar Carp, Goonch, Wallago Attu, Murrall and others; but at some seasons of the year the Mahseer seem to vanish entirely. The river is only fishable after January (when the waters have subsided sufficiently to clear) till the middle of April, after which date, thunderstorms in Mysore cause the river to colour so much as to render it unfishable. Being in a hollow the place is tremendously hot in March and April. The whole country is jungle, in which are a number of pea-fowl, jungle-fowl and partridges; also sambhur and small deer higher up the river. A license to shoot however is necessary and can be obtained on payment of a fee of Rs. 10 from the D. F. O., Salem. For the opposite side of the river a second license is required from the D. F. O., N. Coimbatore. There is a small colony of fishermen living here, who catch enormous numbers of Chilwa and small

fry; also certain number of Goonch and freshwater Shark by live-baiting. These they salt. They own 2 or 3 coracles, but the river here is not wide enough to make a boat necessary.

Sholapadi, 28 miles from Salem station. To Womalur (T. B.) 8 miles is a good made road, from here onwards however the road is nothing but a cart track of the worst description, up hills, through streams and marshes and generally very rocky. A large Village—Maichary—lies half way, the inhabitants are very obliging and will help one all they can. No accommodation or supplies at Sholapadi; there are some nice rapids here and good water for Mahseer and Carp. The Topoor stream joins the Cauvery here from the east.

Some miles north of Erode the Bhavani river joins the Cauvery from the west. At the foot of the Nilgiris the Bhavani is joined by the Moyar river which runs along the base of the northern slope of the Hills, while the Bhavani sweeps round from the south. The fishing in the Moyar river is from all I can hear very indifferent, at least it is so the latter part of its course. Before leaving the hills, by some falls of great height, it goes by the name of the "Pykara" river; under which heading an account of the fishing therein will be found later on. The Bhavani also falls far short now-a-days of the splendid reputation given it by Mr. Thomas.

Whether it is the poaching or some other cause, the river hardly appears worth making a pilgrimage to now, unless you should be stationed in Ootacamund or Wellington, whence you can drop down

to the higher reaches. At Metapollium is a D. P. W. bungalow, and at the station a refreshment room. Coracles too may be hired at Rs. 1-4 per diem. There are a certain number of Carp near Metapollium itself, but it is better to push on up the river. There is a cart road for a few miles, but after that only a jungle track. The following two places were recommended to me to camp at, Manaar (the old fibre works) 18 miles, and Soondaputty 22 miles above Metapollium; and coracles should be taken up with one from the last named place.

From Ootacamund one can drop down to a good stretch of water below Manaar; by driving to Kullakombay (some 10 miles); from here, however, it is a climb of some 3,000 ft. in 7 miles down to the river. All kit must go by coolies or pack ponies. After January very hot and feverish.

Then at Attapadi; higher up the river there is some nice water, only the place is very ungetable. From Palghat station you can go to Mannarghat about 28 miles by bullock carts. Here is a T. B. Then to Attapadi is 12 miles, only foot-path, no accommodation of any sort and practically no supplies. There is fair big game shooting also, but permission to shoot must be got from the owner of the land, who resides near Mannarghat.

Before leaving this river, I should like to quote extracts from a report framed by a Sub-Committee and forwarded to the Committee of the Nilgiri Game and Fish Preservation Association, in the year 1895. The report speaks for itself!

We have made careful enquiries as to the necessity



of preserving the fish of these rivers (Bhavani and Moyar) from a reliable source. Kutti, an old inhabitant of Metapollium, who has for many years lived on the proceeds of fishing in the Bhavani, and all of whose sons are now fishermen, states that the fish are annually decreasing in number and size, and the wholesale destruction of fish during the hot weather months, when the river is low and all the fish are congregated in the pools, is yearly increasing. Troops of men travel up and down the river taking with them nets of all kinds and descriptions which they work in conjunction with fixed engines in the shape of weirs, and they clear out the river of all kinds and sizes of fish keeping only the larger and better ones, and with the indifference of their class throwing the rest away.

The necessity of preservation is further proved by the experience of sportsmen who have known the river for years and who can speak to the fact, that whereas some 10 years ago grand sport could be had with the rod the river is now not worth fishing owing to the scarcity of fish.

..... The most practical means of effecting preservation would probably be the imposition of licenses, but this has been objected to by the Collector of Coimbatore, as interfering with the business of professional fishermen.

The only other means which suggests itself to us, is to provide sanctuaries to which some of the fish could retire during the periods of extreme low water, and in which fishing of any sort should be prohibited.

.....In urging the necessity of adopting some means of preservation to prevent the entire destruction of fish in these rivers, we would like it to be understood that we are not actuated by any wish to preserve the fishing of these waters for European sportsmen, but with the *bonâ-fide* desire to see a valuable food-supply protected, and in the direct interest of those who should be chiefly interested in its preservation, but who are as a matter of fact the chief delinquents. As a matter of fact there are but few European sportsmen who ever visit these rivers owing to the difficulty of access and the fever which prevails all the year round.

Pykara river:—In this river excellent sport may be had fly-fishing for Carp. The river is easily got at from Ooty, the main road to Gudalur and Calicut crossing it by a large wooden bridge at the 12th milestone. A good stretch of river may also be reached by going to the forest hut just beyond the 8th milestone, whence a 2-mile walk across the downs brings one to the junction of the Yemekal stream with the bigger river. Just above the junction is a good run, in a pool below which big fish are known to lie, and occasionally fishing this pool one is gratified by a sudden tug and a rush finishing up with a slack line and much cussing.

The fish are Carp (*Barbus Rosipinnis*) and are handsome fish, red, gold in colour with reddish fins. As a rule they seem to average about  $\frac{1}{2}$  lb.—this in hot weather 1905, oftener less than more, but occasionally fish of 2 lbs, and over are caught,

I have heard so-called keen fishermen saying that it was not worth going out to catch such small fish, but this was the scorn of ignorance, for most men with whom I have discussed the subject, agree that it requires almost more skill to make a good bag of these Carp, than it would to obtain an equivalent number of trout. They are exceedingly shy, and it is very little use hammering away on the chuck and chance its style,—I speak mainly of the river when it is clear and low, in the rains I am told that whenever the water clears a bit, they are much bolder biters. As they generally swim in shoals, the most successful method is to move quietly along the bank, and once a shoal is located to stalk it and drop your flies as daintily as possible in their midst.

If lucky one or more fish will reward you, but it is imperative if the shoal is not to be disturbed to draw away the hooked fish and land him some distance from his fellows. A 10 or 11 ft. rod is a nice length, and light tackle is required, trout flies will answer, dark coloured being the best, though as a matter of fact all flies seem acceptable to the fish when on the feed.

However, if I had to pin my faith to a trio, it would be an Alexandra as tail fly, and a March brown and Cock-y-bondhu as droppers. Two excellent natural baits there are for these fish: No. 1 a small brown toad found in the swampy spots where small streams run in, and No. 2 a brilliant green beetle found generally on rose trees in the gardens of Ootacamund. At the 12th milestone is



a well-fitted travellers' bungalow, furnished with beds, crockery, sodawater, etc. Just above and below the bridge fish often lie, and from the bridge downwards about 1 mile to some small falls, is all good water. A few miles further down the river hurls itself off the Nilgiri plateau, to become the Moyar river at the base of the hills.

And not the least charm about fishing in this river, is the scenery along the banks, green turf with bracken and wild roses, sweet scented privet, deep colour rodedendrons and less ethereal, but quite nice—wild raspberries.

In this river I have replaced several marked fish, and should any reader chance to catch one of these I should be very grateful if he would note particulars—*vide* end of Chapter XIII.

Now to hark back up the Cauvery river into Mysore. At Narsipur the Cauvery is joined by the Cubbany which rises in the Wynaad, and flows through dense jungles for a good deal of its course. It is a most perfect river to look at, and must contain some enormous fish, but like all other rivers that run through Mysore is fearfully poached. The best place to fish it is at Kakankotta 48 miles from Mysore, *via* Chettanhalli (B) 10 miles, Hampapur (B) 19 miles, and Antesunte (B) 35 miles. Good road all the way, carts being easily procured at Mysore. The worst of the Cubbany river is that it never seems to clear satisfactorily, however some very good bags have been made in past years at Kakankotta; in 1902 two men catching 200 lbs.

weight of Mahseer in one day, biggest fish 60 lbs.; and a Mr. Van Ingen caught a 64-lb. Mahseer there a few years ago. A boat is exceedingly useful there, as the banks are so overhung with jungle; however a fair amount of fishing can be done by wading. There are good rapids just above and just below the bungalow. The Bawalli stream joins the river 8 miles up, and all the water from here to some 4 miles below Kakankotta bungalow is good, only several of the reaches are too broad and deep to tackle without a boat. The river holds innumerable Carnatic Carp and small Barils, which latter afford pretty fishing with a light fly rod. Also occasional bags of Labeo, have been made opposite the bungalow, so I am told. The bungalow which is supposed to be a second class one, is small and badly fitted up. The whole place is densely forest clad and there are large numbers of elephants about. A certain amount of big game is to be had, but the place seems much poached, both river and jungle. A few supplies can be got here, such as eggs, milk, fowls, etc.

Half way between Antesunte and Hampapur, the Tarcaun river crosses under the road, and 2 miles further down joins the Cubbany. There is a temple by the junction, the river here is very broad and still, and the sands are shaky and it behoves one to walk warily. There appear to be big fish in the river here, but it is impossible to fish without a boat.

At Hampapur the river is only  $\frac{3}{4}$  of a mile distant, by a path through the village. It is

however a broad quiet stream here, and does not entice one to fish. Opposite the Noogoo river runs in, which I am told is a delightful stream higher up and full of fish. It is difficult to get at, however, and I never had the leisure to explore it. There is a ferry across the Cubbany here.

#### THE TUNGABHADRA.

This river is formed from two rivers, the Tunga and the Bhadra, which uniting north of Shimoga, flow on to join the Kistna, east of Raichur. Unfortunately, both the two rivers flow through Mysore and have been most unmercifully poached. All the following places appear good water, and there certainly are *some* fish there, though personally I have never done much good myself, and have been told the same by other men too, and that the fishing was not worth troubling about. Still for anyone who may be passing that way on a trip, they might be worth trying. Shimoga; Railway Station (T. B. 1st class) on the Tunga, Carnatic Carp only; Sakrebail 8 miles (T. B. 3rd class) right on the river, nice water but fishing indifferent. Muggers here, also innumerable jungle-fowl and Malabar squirrels, and very fair big game shooting, *i.e.*, cheetah, tiger and some bison.

Mandagadda, 2nd class T. B.,  $8\frac{1}{2}$  miles from Sakrebail, river  $1\frac{1}{2}$  miles distant.

Malur, about 9 miles on, 3rd class T. B., no good stopping here but push on to—Thirthalle, about 9 miles, 2nd class T. B., and some delightful water, which would give excellent fishing if only it was



not so heavily poached. A deep water hole through which the river runs here is worth seeing.

Agumbi, 18 miles from Thirthalle, *via* Megarvalle (B) about half way. There is a 2nd class T. B., nicely situated, and from the top of the Ghauts  $1\frac{1}{2}$  miles away, a magnificent view can be had of S. Canara right away to the sea at Allepy. There is no river here, but in a small tank under the hill opposite the bungalow, there are—or were—some enormous Murrals, which used to come up and bask on the surface during the mid-day hours. Very thick evergreen jungle all round.

Benkipur is on the Bhadra. Railway station here, and just across the river a T. B. There is a nice rapid below the railway bridge, and between the railway and road bridges is also good water. Fish: Carnatic Carp.

Between Yedhalli and Lakwalli the road crosses the Bhadra river by a bridge. Below the bridge and in the thick jungle I have known of Mahseer being caught. Here the country is so wild and the villages so few, that the river really *ought* to hold fish, as even though in Mysore it cannot be so *very* much poached.

On the Tungabhadra itself, some 30 to 40 miles from Kurnool, away in the jungles, I am told there is excellent Mahseer fishing to be had, but the places are very difficult to get at without local knowledge or help from someone who knows the ropes.

Then near Hospet, 12 miles distant, is Balahunshi on the Tungabhadra (Bungalow). There is a

natural bund here with one very nice run through it, and I am told there is other nice Mahseer water here.

Then at Sovainhalli, 2 marches from Balahunshi, there is a good camping ground on the bank of the river, and I have heard of Mahseer being caught here though no very big ones. Ferry across Tungabhadra here.

Dumbal, some few miles from Sovainhalli, is an excellent place for black buck, also pig. There is a large tank where good duck shooting may be had in the season, and sometimes a few geese may be added to the bag. There is a small circular pond fed by the big tank, which used to hold lots of Murrel.

#### THE KISTNA.

Near Kistna station, the best water is under the railway bridge and just above and below. Higher up the Bhima runs in, but I am told that the junction is not worth trying. A couple of miles below the station I hear that there is a bungalow, and that good fishing is to be had opposite an island lower down the river. From the station to Mandipla 12 miles away on the river. Here there is a big pool holding some very large fish; a boat necessary.

From Nundyall station, a road runs N. N.-W. to the Kistna about 40 miles distant. At about 3 miles south of where it reaches the river is the junction of the Kistna and Tungabhadra. At-macoor lies 30 miles north of Nundyall, round here

there is good shooting, and about 15 miles north the Kistna runs through great gorges and impenetrable jungles. In these parts I have heard rumours of monstrous Mahseer, but the river is very difficult to get at. A road leads from Atmacoor to a place called Pag, and another track leads from here to two pagodas on the river 5 miles distant. Also from Atmacoor a road goes to Mooslemuddoo 10 miles distant, from here a track runs 6 miles due north to the Kistna. A lot of local knowledge and help would however first be required by any sportsman thinking of tackling the fishing here.

#### THE BHIMA.

Yadgiri; railway station with nice waiting room. The river runs within one mile of the station. The fish are Mahseer, run large, but are very shy. A boat is necessary. Cross railway line and take a foot-path that leads straight to a small temple on the river bank; below this is a second temple opposite which is a good run, in midstream. Fifty yards up a small tributary joins, and the pool into which it runs holds some very large fish. (N.B. To anyone casting a long line this pool *might* be fished from the bank.) The banks unfortunately are very soft and one cannot get near the water's edge in most places. About a mile down stream are some more fair rapids. The country is all open and the climate very sultry.

There is good fishing to be had I am told where the Muta-Mula joins the Bhima below Poona.



## FISHING NEAR POONA.

The Muta-Mula runs through Poona and holds Mahseer. Some of the best runs are:—Two just below the Cavalry lines at Ghorpuri. Then the runs 4 miles below Loni station; not the runs just below the station which are no good. And the runs at Kowrie—8 miles below the Cavalry ford—on the Sholapur road.

Then above the bund there are some monsters, the best lie appears to be between the boat house and the temple; the fish however are not often to be caught except by paste bait, the early morning being the best time.

Kharakwasla lake; 10 miles from Poona, nice bungalow here (D. P. W.), permission required to occupy it. There are generally some boats on the lake, belonging to the boat-club. Troll in a line between the bungalow and a small mango tree on the opposite bank. Put on a good-sized spoon  $2\frac{1}{2}$  to 3 inches and about 3 oz. of lead some 3 ft. away. The fish—Mahseer—appear to run from about 10 to 15 lbs. Fair mixed bags have been made, so I was informed, fishing with paste from the bund. Best time for fishing during heat of day.

Then near Talegaon station, I have heard of Mahseer being caught in the Indryani river.

Also 65 miles from Poona, on the Nasik road, there is a place called Ambi, on the Mula, a tributary of the Godavery; here I have caught Mahseer though none of any great size; still there is some excellent water here in October and November, and the river must hold fair-sized fish I should think,

### SHARASVATI RIVER.

The celebrated Gairsoppa falls are on this river, about 60 miles from Shimoga. Two bungalows here: one in Canara, the other in Mysore. Some good Mahseer water above the falls and the pool at the bottom holds big fish. The falls themselves are well worth a visit. Routes: *via* Shimoga to Kumsee (B) 15, Anantapur (B) 30, and Sagar (B) 45 miles. From Kumsee to Falls the road is all through jungles. Or *via* Honavur on West Coast by boat to Gairsoppa village, about 18 miles from the Falls. A friend, writing to me only last week from the Falls, says: "Fish very scarce here, they say natives poison the river a lot."

### NETRAVUTTI RIVER.

Runs into the sea near Mangalore where it is a broad deep river. Higher up it is fed by numerous tributaries in which good fishing may be had. The Kemphulle river rises in the Manjarabad Ghaut, and joins the Kumardhari about 10 miles from Uppinangadi, at which latter place the Kumardhari joins the Netravutti. To reach this stream. Arsikere station, 26 miles to Hassan (B), thence 24 miles to Saklasapur (B). Here the road begins to enter the Ghauts and passes under the old Manjarabad fort on the left.  $5\frac{1}{2}$  miles from Saklasapur the upper waters of the Kemphulle are crossed by a bridge. The stream is small here, but Mahseer of 2 and 3 lbs. have been caught as high as this. Another  $4\frac{1}{2}$  miles brings one to Marnhally bungalow. Then 8 miles all down hill to Kemphulle, where

there is a forest hut, no village. Here a small stream, the Kadmane, joins the Kemphulle river just under the bungalow, and from this spot down to Gunjia (B) 7 miles is all nice water, holding Mahseer. At 4 miles from Kemphulle one crosses the boundary line between Mysore and South Canara. From Gunjia down to Shiradi (B) about 6 miles, is also good water. At one mile down the road from Gunjia, the Cubbinhalli, a big stream, runs in from the North. Behind Gunjia bungalow, a road crosses the Kemphulle (fordable generally November to May at this point) and runs through thick jungle to Subramani on the Kumardhari river, where also good fishing may be had. Most of these streams clear very soon after the monsoon, *i.e.*, about end of September, and by January are only fishable in the pools. The Kemphulle river can be got at anywhere from the road between Kemphulle and Shiradi bungalows. When it is coloured by thunderstorms or heavy rains in the ghauts, the Kadmane or Cubbinhalli streams can usually be fished, since coming through dense jungle they appear to remain always more or less clear. The latter stream however is a difficult one to fish, without wading very freely and deeply, owing to the trackless jungle that lines its banks. The jungles round here hold numbers of bison, sambhur, pig, etc., a license however is necessary to shoot either on the Mysore or South Canara side.

Cicilly, some 10 miles north of Shiradi, is on another small tributary of the Netravutti. Here there is a temple where they feed the Mahseer.



Lower down however, good fishing may be had. All these jungles are exceedingly feverish from February till June.

#### THE KALA-NADI (or Kalinadi).

Further north we come to a network of streams which all unite eventually in the above named river. The Kala-Nadi rises in the Ghauts bordering Portugese territory and runs S.-E. till joined a few miles south of Hallyal by another big stream the Tutwal nullah (a bungalow at the junction); then it doubles back, and running S.-W. debouches into the sea near Karwar on the West Coast. Holds Mahseer most of its course. Hallyal (B), 7 miles from Alnavar station, is near the Tutwal nullah.

The Tutwhal bungalow (on the nullah of that name, and one mile from its junction with the Kala-Nadi) lies 28 miles, by good road from Alnavar. There are bungalows at Hallyal (as above) and Sambrani 14 miles. All round the bungalow at Tutwhal lies dense jungle—holding tiger, panther, bison, sambhur, cheetal, boar, etc.—making it rather difficult to get at the Kala-Nadi. But all the water that can be reached, is ideal Mahseer water, nothing but runs and falls, about one mile about the junction the river falling some 300' in as many yards. Best time after 15th October.

N.B.—On the road just before reaching milestone 70, is a blazed tree. Taking this as a start a series of trees so blazed mark the position of a cleared track to the river, much overgrown by grass, etc., but still infinitely the easiest way to the river.

Then Supa, 17 miles by good road from Londa station, is at the confluence of the Kalinadi and Pandri rivers. Small T. B. here. Below the bungalow is an anicut, and for  $1\frac{1}{2}$  miles down, the course of the river lies between two hills and is one series of rapids and falls, all excellent water. Then comes a deep still reach which extends for at least two miles. The river holds Mahseer and other Carp in large numbers, also innumerable fry. It does not appear to be much poached, but the fish are extraordinarily canny and will not look at artificial baits. There are some good runs about  $\frac{3}{4}$  mile up the Kalinadi above the junction; the Pandri does not appear to be worth fishing, at any rate not within a mile of the bungalow. There is a good deal of difficulty here in getting small fish as bait, as although Chilwa and Barils abound, they appear indifferent to almost any form of bait, and casting nets are conspicuous by their absence. The best fishing is to be had when the rivers clear after the monsoon, at the end of September or the beginning of October.

One mile from Londa station the Pandri and Tarwa rivers join; there are one or two good rapids near the junction, and 2 miles lower down, near Astoli (T. B.) there is some good Mahseer water. Artificial bait seems to meet with but scant success in these rivers, a neatly mounted small fish some 4" long appearing to be the most successful lure. These rivers run down very quickly after the monsoon ceases; they are really at their best for fishing during any break in the rains, which is of

sufficient duration to allow of their temporarily clearing.

The Dushki nullah, runs under the S. M. R. line one mile east of Castle Rock station. There is a good run just under the bridge, also another, one mile down. The banks are densely clad with jungle, and spinning is difficult in most places. Curiously in this stream the Mahseer appear to take a spoon well, though they will not in the Pandri or Tarwa, nor in the Kalinadi in which all the streams eventually unite.

The Dushki joins the Pandri some 5 miles south of Castle Rock station; there should be some good water below the junction. I have heard anyhow of a big pool at Junction full of large Murrel.

#### THE GATPRAHBA.

Rises in the Ghauts south of Amboli, and joins the river Kistna just west of where it crosses under the Gadag-Sholapur branch of the Southern Mahratta railway. On the Amboli road, 32 miles from Belgaum, is Punderi (B) within a quarter mile of the river, which holds good-sized fish here, also crocodiles. At 17 miles on this same road is Tambulwadi (B) where a bridge crosses the Tamraparni a tributary of the Gatprahba. This stream also holds Mahseer and Mugger, and can be fished from the bungalow. Then 16 miles north of Belgaum, the Poona road crosses the Gatprahba at Sutguttee (B), and both above and below the bridge are some good Mahseer pools and rapids. This river however appears to take a very long time to clear.



Then near Dhupdal station the river forms a lake of large expanse, there being a big bund here. On the opposite side of the river is a well found D. P. W. bungalow. The lake itself hold enormous fish, but a boat is necessary to troll from. Three-and-a-half miles down are the Gokak falls—180 ft. high. In the pool below the fall are Mahseer, Wallago Attu and other fish, a boat is necessary unless one fishes in the turbine stream, but as the only path which leads to the turbine house and pool was made by the mill authorities, the pool here is more or less private property and permission should be asked before fishing in it. Two miles below the falls, near Gokak village, the Markandya stream runs in, and about 3 miles up it there is a gorge and falls with some nice water, but this stream which rises near Belgaum is almost invariably badly coloured, owing to the red soil through which its course lies.

#### THE MALPRABHA.

This river runs through Khanapur, 16 miles south of Belgaum, and is said to hold Mahseer here, but for some inexplicable reason it always appears to be dirty at this point of its course, though clean higher up and lower down.

Mugutkan Hubli, 19 miles by good road from Belgaum, is on the Malprabha river. Here there is a deep reach of the river holding numbers of Carp and Murrel. Unfortunately, however, it is heavily fished by the natives, who set night lines, frog trimmers and use large drag nets. At this place

also are some tanks—said to hold fish—on which one can get good duck and snipe shooting in the cold weather.

Then I am told that Mahseer are to be caught in the Mackunda and other tributaries of the Godavary in the Vizagapatam district. Anyone going to those parts would however soon pick up information on the subject.

Also the Ruskiliya which flows into the sea in Ganjam district holds large numbers both of Mahseer and Carnatic Carp.

Again from hearsay—a far cry to Dhubri on the Brahmaputra river. Excellent fishing to be had in the numerous tributaries that join the big river from the Bhutan frontier.

The Mahseer appear to be monsters there, also Barilius Bola are numerous. Bison, buffalo, rhino, all sorts of big game to be got, but country is very wild and elephants are required for shikar.

About 80 miles above Dibrugarh, the Brahmaputra or Tsan-po, is joined by several tributaries, in most of which, notably the Dibang river, excellent Mahseer fishing is to be had in November and December. Troll the pools with a 2½ inches silver gilt spoon and have 250 yards line—so my informant says.

Back again—also second-hand knowledge. Chelama station near Nandyal, to Birenni 20 miles. big fish here.

The Mahanadi river, near Sambalpur, from Jasugudra station, holds Mahseer.

Near Nilambur, on one of the upper branches of the Beypoor river, very fair Mahseer fishing can be got.

At Kodaikanal in the Pulney Hills, is a large lake, in which Chilwa and other small fry abound. Very pretty sport may be had, fishing for them with a light trout rod.

Then I hear that there is fishing to be had on the Tapti river, north of Nandurbar, but of this I have no definite khabber. Also near Chandi on the Tapti.

The fishing in the Nerbudda is mentioned fully in the N. P. F. C. Anglers' hand-book, and in the Rod in India.

By the way I hear there is a new edition of former book just coming out, entitled "Anglers' Hand-book for India."

There is fishing to be had in the Sabermati and Mahi rivers, both of which flow into the Gulf of Cambay. A good place on the former river is near Ahmedabad. Fourteen miles up the river lies the village of Rayasan; road only cart track and very bad, camels however can be got at Ahmedabad, and this is the best way to go out. There are also



excellent sleeping and refreshment rooms at the station. Below Rayasan village there is a ford. Above this there is a tobacco field which runs down to a big still pool in the river. The pool—from a well in field to where two rocks jut out into the water—is simply crammed with fish, Mahseer, Murrail, Rohu, Wallago Attu and numerous other species. The pool is best fished by crossing the ford and wading in opposite the tobacco field, though off the two rocks is also a good place. Good time December. I was also told that there was good fishing further up, by Indroli village, but the river bed is all sand and tiring to walk over, and though I went some miles up the river I never struck any other good spot.

In the Mahé river, Mahseer fishing can be got near Sevalia station on the B. B. & C. I. Ry. There are two bungalows here. The place is unfortunately terribly poached.

I am told that there is fair fishing in the Banass, if you know where to look for it. The fish are Mahseer, B. Bola, Wallago Attu, etc. The Banass is a tributary of the Chambal, which runs into the Jumna, south of Etawah.

Then from hearsay, the Sindh river, 45 miles west of Jhansi, a good road all the way. Bungalow on the river. Fish: Mahseer and Murrail.

The Betwa river, from the Indian Midland Railway between Bina and Jhansi, holds Mahseer, B. Bola and other fish.

The Dhasan river, crossed about 14 miles from Nowgong by the Jhansi road, there is a small bungalow here. Fish: Mahseer, Murrail, Wallago Attu, Tengra, Rohu, also Turtles and Mugger. The course of the river is all through jungle, and the banks are intersected by innumerable nullahs making it difficult to follow along the river.

Then there are the Sone, and the Tonse, and the Ken; in all of which good fishing may be had, if only you can find out the right places and the right time to go.

Then the Sarju river, about 3 marches from Philibhit. This is a wild and lovely little river, and holds enormous fish, but it is exceedingly difficult to hit off the right time to be there as the stream is glacier fed and liable to be discoloured by melting snows.

The Sardah river; from Philibhit to Katema (B) about 20 miles by fair road. Then another 10 miles to Mandi (B). Good fishing above and below bungalow.

Then the junction of the Sarju and Kali rivers, near a place called Pachisar; there is excellent Mahseer fishing here early in the hot weather.

Then Bagesur on the Sarju, between 60 and 70 miles from Kathgodam Railway station; there is a bungalow here and good Mahseer water, and I am told June and October are the best months.

There is very fair fishing in the Kumaon Lakes, but to anyone visiting those parts, let me recommend a most excellent little book by Dr. Walker, entitled, "Angling in the Kumaon Lakes."

In Tochi river I am told that there is snow-trout fishing near Datta Khel.

At Kushalgarh (B) on the Indus I am told of big Mahseer; a good place to fish being below the railway cable, about 4 miles down where another river runs in.

Hardwar (B) on the Ganges; good Mahseer fishing in autumn and spring.

I was promised a full list of good localities in Travancore, but I am sorry to say my correspondent has failed me in this matter.

#### ESTUARIES.

Bamin and Nair fishing is decidedly to be got at its best on the Malabar Coast. Elattur, 5 miles from Calicut, is the first place. There the railway crosses the backwater by a fine bridge, the sea being  $\frac{1}{2}$  mile further down and out of sight. The bridge is too high to fish from comfortably, but boats can be hired here. There is a large ferry crossing the river just below the railway bridge. There are also plenty of Mugger in this backwater, so it is worth while taking a rifle with one. Perch (*Lutianus Roseus*) are fairly numerous.



Mahé; The road bridge here is perhaps the pick of all the fishing stations. It lies  $1\frac{1}{4}$  miles from the station, and is an old wooden pier bridge of several spans. The railway bridge 1 mile up the back-water may also be tried, but is not I think quite as good as the road bridge. The bar is only 400 yards from this latter bridge, so that the open sea lies in full view.

Tellicherry; there are 3 bridges out on the Cannanore road, also 3 railway bridges. The first bridge is  $1\frac{1}{4}$  miles from Tellicherry, on a small back-water, it is useless to try here however, owing to some old piles out in the stream, which interfere with spinning. About  $\frac{1}{2}$  mile further on is the second bridge, facing the sea less than  $\frac{1}{4}$  mile away. This is an excellent bridge. The third and biggest bridge lies one mile further on, and may be tried if the second one fails to afford sport. This third bridge is an excellent one for Red Perch, and though I have seen one or two Bamin and Nair here, it is not so good as the others I fancy, for these 2 latter fish.

Then the railway bridges; the first is small but is worth trying, there being one or two spots were Bamin always seem to lie.

The second is perhaps one of the best bridges of all to fish from, as both Bamin and Nair seem to frequent this bridge.

The third is by far the longest, and is I think the most fascinating to fish from, as one moves such a large number and variety of fish under it, in a day's outing. Bamin, Nair, Red and Grey Perch, Mullet,

Turtles and Snakes are among the variety mentioned. It must be remembered, however, that sport from the different bridges seems to vary according to seasons and years, and no rule can be laid down for certain that such and such a bridge is the best.

And another point exceedingly annoying is that sometimes one or more estuaries will be very dirty and quite unfishable, the others remaining clean.

For this I could find out no satisfactory reason from the native fishermen though I asked many; one of the most plausible reasons advanced being that a mud bank—known to exist off the Malabar Coast—shifts up and down the Coast at intervals and dirties the particular backwaters off which it lies.

One piece of advice, if you make a pilgrimage to an estuary and find it dirty, do not believe the natives when they tell you it will clear at high or low tide, because it won't; the Aryan brother is always ready to oblige and he sees that you will be pleased if he takes an optimistic view of the matter.

Fishing from a railway bridge one wants a fairly good head, and shoes that will not slip.

There is a railway bridge at Kudulundi, on the Madras side of Calicut; which looks as if it might afford sport, however, I have never tried it.

Near Cannanore, 6 miles by Bilipatam village, is a deep swift run in a backwater, where Bamin may be caught; anyone going to Cannanore would soon find out the place.

And the Cochin backwater is said to be a good place for both Nair and Bamin.

Ennur ; 10 miles from Madras, on the East Coast, the mouth of the Khasastala forming a good back-water. Here the N.-E. Railway crosses on a very high bridge. The estuary is full of Whiting, Perch and other fish, and I have also seen Bamin jump frequently, but have never managed to catch one. If, however, any resident of Madras spent 3 days out there, and studied the tides, there would appear to be no reason why the Bamin should not take as well as on the West Coast.

I have also heard of Bamin at Nellore, and again near Vizagapatam, and at Masulipatam, all on the East Coast.

Then Bamin are to be caught in Bombay harbour during the monsoon ; one of the best spots being near Sunk Rock lighthouse. This fishing however is very different and not nearly so pleasant as the Malabar Coast fishing. Whereas in the latter places the water is clear and natural bait is the thing to use ; Bombay harbour always seems dirty, and large silver Devons are the lure usually used. Also the fishing in the Harbour is very uncertain, and except in the monsoon, it is exceptional to catch fish, while on the Malabar Coast one can generally move fish, at any rate, at most seasons of the year.

Nair fish are also to be caught at places in the harbour, so I've heard, but I've never discovered the places myself.



Nair are to be caught in Karachi harbour.

Also Nair (called Begti) are present in large numbers in the Hooghly, from Calcutta right down to the sea.

#### TANK FISHING.

I regret that I can give but little information under this heading ; if only Anglers would write and let me know of places, I would willingly put them into this book, should a 3rd edition come out, but it is so hard in this country to get any information about fishing ; either men will not give away pet places, or they are too lazy to give the information ; and I am afraid that the evil is more aggravated in South India than North, perhaps it is the delightful cold weather of the Punjab that stirs people up and makes them more communicative of good places.

To anyone keen on Tank fishing, let me again recommend that excellent book "Tank Angling," by H. S. Thomas. Therein they will find much good advice, and also they will find many localities mentioned. But let me warn readers that before deciding to try any tank mentioned in that book, or in this either, to find out from friends if it still holds fish ; since alas many once excellent tanks, that used to be crowded with fish, are now quite empty, destitute even of fry. A river even if systematically netted and poached by natives, has some chance of recouping its population each year, at any rate it holds places of refuge in deep out-of-the-way pools ; but a tank is absolutely at the mercy

of its spoilers, who, if they be so inclined, will not leave one single living insect in its waters.

Well.—The Red Hills lake must hold enormous fish. It is 10 miles by fair road from Madras, and there is a public works bungalow and a boat there. But it is an almost hopeless place to fish, since it apparently holds no fish that will take a spinning bait at all, thus putting trolling out of the question; while owing to its vast expanse of water it seems to be always rough, making float fishing a slow and unprofitable proceeding.

The ponds in the People's Park at Madras hold Murrel, *Notopterus Kiprat*, small *Labeo*, a few Gourami and other fish. A license is required. Full information however may be had concerning these ponds, by enquiring at the boat house near the animals' enclosure. The great drawback to fishing in them however is their publicity.

The Madras fort moat holds enormous numbers of fish, some of them very big. Among others there are—*Megalops*, *Tengra*, *Etiopius*, Mullet, Perch, Turtles, Crabs, Snakes and also there are said to be Nair fish. Personally I have never caught one of the latter fish there, but the Madras Museum holds a fine Nair fish of over 30 lbs., that was caught many years ago in the moat. Some places are better than others, for live-bait fishing or spinning with natural bait, a good place is to the left of St. George's gate and just round the corner. The Tommies from the regiment stationed in the fort catch enormous numbers of *Tengra*, and also *Etiopius* and some Turtles, fishing with worm.



There used to be an occasional Mugger seen in the moat, but one, supposed to be the solitary survivor, was killed about 3 years ago.

Then at the Harness and Saddlery Workshops (Madras) which are the Old Powder Mills, are 4 tanks, all of which hold fish. Permission should be got from the R. A. Officer in charge. The large tank on the left as you go in, contains large numbers of Megalops, Tengra, N. Kapirot and Etroplus; the smaller tank at the further end of it holds innumerable Murrel (some of them big), Etroplus and Tengra.

The centre tank is said to hold Murrel and other fish. The long double tank on right of entrance holds Tengra, Etroplus and an unlimited supply of prawns, some of these latter, perfect monsters.

A tank alongside the railway, opposite the Scotch Kirk, holds Megalops, Olive Carp, N. Kapirot and Eels. Permission should be got from the owner, whose name may be had from the temple at south end of the tank. It is not convenient to fish there always, as the Municipality have a cheerful way of turning the compound into a plague segregation camp.

At the Buckingham Mills there are 2 tanks, and at the Carnatic Mills one large tank. These tanks are strictly private and are used for supplying the Mills with water; so permission must be got from Messrs. Binny & Co. to be allowed to fish therein. The 2 Buckingham tanks hold enormous numbers of Megalops, some of them very large, they hold also a few Murrel, Olive Carp, Gudgeon, Eels, Turtles and Snakes. The Carnatic tank seems to be crowded out



with Murrail, though there are some *Megalops* also in it. (Since I wrote the above, I am told this latter tank has become full of *Megalops*, and yields excellent sport.)

About  $\frac{1}{2}$  mile below the bridge over the Adyar river, where the Mount road passes through Saidapet, there is an old anicut, and with a stretch of still water above it. Here there are innumerable *Chilwa* and probably many other sorts of fish. The place however is rather ungetatable.

Ennur backwater has already been mentioned under the head of Estuaries.

The Harbour at Madras also is worth trying, see remarks at end of Chapter X.

At Trichinopoly I am told that there are still big fish to be caught in the large tank, below the hill; but concerning the Trichy, Tanjore and Negapatam tanks, see Mr. Thomas' "Tank Angling."

Nellore district. At Buckleddipalem 10 miles out, there is a temple tank that used to be simply full of *Labeo*, also prawns, but I am told that the heavy rains of a year or two ago, broke away one of the sluices, and that enormous numbers of the larger fish escaped from the tank.

Then some 13 miles west of Nellore there is a large reservoir, which holds heavy fish, but owing to the large expanse of water, it would be necessary to ground-bait thoroughly first, to get your fish together.

In Nellore itself there is a tank that holds *labeo*,

but it is very weedy, and a place would have to be cleared before any good could be done.

Near Mysore city there are 2 large pieces of water, holding Labeo and other fish, but ground-baiting and local knowledge of the places, would be necessary before trying them.

At Agumbi on the Western Ghauts, there is a tank holding enormous Murrel; as mentioned earlier in this Chapter.

At Calcutta there is a Club, and some very excellent tank fishing to be got; and anyone going there would soon obtain the requisite information.

Ootacamund lake contains large numbers of (English) Carp, Tench and Barilious Bakeri, and most probably many other species.

The two former were imported some years back from England, a sad waste of laudable energy both from an eating and sporting point of view. However they thrive and are supposed to run big, affording a means of livelihood to large numbers of native anglers. These men sit, each at his own particular pitch, (from which he has carefully cleared away the weeds that abound in this lake) with 12 to 20 rods in front of him.

These rods are baited and laid down and the lines with floats attached are thrown out to take their chance. The man himself has generally one bigger rod with which he can cast out further and devotes himself to this rod abandoning it hastily

however and grabbing one of his other numerous rods whenever a float signals a bite. Very pretty sport can be had any evening between about 5 o'clock and sunset catching Barils with a light trout rod and midget flies, the fish rise freely and fight well for their ounce or two of weight. And when freshly caught they are very beautiful little fish to behold.

The Marlimund reservoir holds the water-supply of Ooty, and fishing therein is strictly prohibited. However it is possible occasionally to get a pass from the President of the Municipal Committee, and a pleasant afternoon may be spent on its banks. It holds large fish, but they are difficult to catch; the largest I saw caught was a 5-lb. Carp (a most beautiful fish, dark green and silver) who rose to a fly and fought like a demon. The lake abounds with small minnows, for whom small flies and quick striking are essentials; a dish of these when fried like whitebait are delicious eating.

Of the Burnfoot lake (which is private property) and the Lawrence Asylum lake I have no very reliable information, though small fish abound in the latter.



## CHAPTER XVII.

### DESTRUCTION OF FISH IN INDIA.

**J**UST a few words in conclusion on the immense destruction of fish and fry in India. Perhaps this matter is one rather outside the scope of a little book like this, but it is a subject of such importance that it behoves every angler to lay it to heart, and to do his best towards remedying the evil if ever he gets the chance.

Of late years a certain amount has been done to remedy the evil. In 1897, I believe, a Fisheries Act was passed, and in 1902 Mysore brought out new game laws, which afforded protection to the fish as well.\*

But all these laws are carried out half-heartedly all over India, except in a few fortunate districts where the Civilian in charge, or the Police Superintendents happen to be keen sportsmen.

The netting and poaching in many rivers is so great, as to make it a wonder that any fish survive at all. It is no exaggeration, though, to say that in many rivers the supply of fish has decreased 60 % in the last 25 years.

---

\* Since writing the above (in 1903) I have seen drafts of the new laws, relating to shooting and fishing in India, which the Government have in hand.

It is not only from an angler's point of view that the matter should be looked at; it is more or less a matter of national importance to India.

In the great rivers we have a food-supply which, if properly looked after, might be the saving of literally lakhs of lives in a big famine.

And out here we have not the sea to fall back on, as we have at home, as a protected area for our river fish. None of the bigger Carps, like the Mahseer, go out to sea yearly as do the Salmon. And the Indian rivers unfortunately lend themselves so easily to poaching. Regularly every year the rivers are swollen by monsoon rains, and the big fish take the opportunity to ascend and lay their eggs in the upper reaches, so that when their fry are hatched they may find the waters more suited to their puny size than the heavier waters of the rivers lower down. Then when the floods begin to subside the larger fish begin to drop down the river, followed by the smaller fish, till the upper waters are left to small fishes and fry.

It is during this annual descent that the greatest destruction of fish occurs. The instinct of all Indian fish is intensely migratory, and as soon as the fry hatched out in the upper waters get to any size, they too follow their parents down the river in search of pastures new and more food. Then in every spot where the river can be dammed into two or three channels, are set traps of sorts, and every little runnel into paddy or other fields is made as the broad and easy way which leadest to destruction, into a basket trap where it makes its

first drop to a lower level. You will say, "how, then, is it any fish survive?" And very few fish would survive, if Indian fish spawned like the English fish, getting rid of their eggs all at the same time.

But the bigger Carp, like the Mahseer, spawn two or three distinct times in the year, so that it follows that many of the larger fish will spawn in the lower reaches of the river, when there is very little water comparatively, taking advantage of runs and rapids into pools to lay their eggs in the shallow water at the head or tail of the run. Thus many fry are born in pools which are too deep and large to be netted or poached (always provided that they are not poisoned, though this luckily has been to a great extent put a stop to in the last few years); and these are the fry which maintain a certain population of fish in the rivers.

Well, enough of this subject now. I can only hope that should any of my readers attain to such felicitous positions as Viceroy, Governors or Commissioners, they will then exert their influence on behalf of any fish that may be left alive in our Indian waters.





















# Diary of Localities.

| Place. | How got at. | On whose authority. | Sport to be had. | REMARKS. |
|--------|-------------|---------------------|------------------|----------|
|        |             |                     |                  |          |
|        |             |                     |                  |          |
|        |             |                     |                  |          |
|        |             |                     |                  |          |









253

NOTES.

---



354

NOTES.



255

NOTES.



256

NOTES.





## INDEX.

|                    | A.   | PAGE | C—contd.                      | PAGE    |
|--------------------|------|------|-------------------------------|---------|
| Agumbi             | 215, | 237  | Casting net                   | ... 173 |
| Ahmedabad          | ...  | 226  | Casts                         | ... 158 |
| Amboli             | ...  | 223  | Cauvery river                 | ... 202 |
| Andamans           | ...  | 119  | Ceylon, fishing in            | ... 78  |
| Annealing wire     | ...  | 198  | Chilwa                        | ... 41  |
| Archer spinner     | ...  | 169  | Chinchincuttay                | ... 203 |
|                    |      |      | Chambul river                 | ... 227 |
| B.                 |      |      | Cicilly                       | ... 220 |
| Bait, kettles      | ...  | 173  | Coloured water                | 25; 27  |
| Bagesar            | ...  | 228  | Crabs                         | ... 136 |
| Bamin              | ...  | 68   | Crocodiles                    | ... 125 |
| Banass river       | ...  | 227  | Crocodile spinners            | ... 169 |
| Barbells           | ...  | 144  | Cubbany river                 | ... 112 |
| Barils             | ...  | 39   | Cubbinhalli river             | ... 220 |
| Barilius Bola      | ...  | 39   |                               |         |
| Belgaum            | ...  | 224  | D.                            |         |
| Benkipur           | ...  | 215  | Dead bait                     | ... 11  |
| Betwa river        | ...  | 227  | Dead bait, preservation<br>of | ... 189 |
| Bhadra river       | ...  | 214  | Definition of terms           | ... 143 |
| Bhavani river      | ...  | 207  | Destrn. of fish in India      | 239     |
| Bhima river        | ...  | 217  | Dhanas river                  | ... 226 |
| Bindings           | ...  | 197  | Diary forms                   | ... 141 |
| Blackspot          | ...  | 41   | Dindinad                      | ... 203 |
| Bombay             | ...  | 232  | Dolphins                      | ... 137 |
| Boots, care of     | ...  | 195  | Dress                         | ... 145 |
| Brahmaputra river  | ...  | 225  | Drop flies                    | ... 41  |
| Butchwa            | ...  | 42   | Drying line                   | ... 198 |
| Butter, preserving | ...  | 199  | Dyeing gut                    | ... 197 |
|                    |      |      | E.                            |         |
| C.                 |      |      | Edibility of fish             | ... 141 |
| Calcutta           | 233, | 237  | Eels                          | ... 131 |
| Cannanore          | ...  | 231  | Estuary fishing               | ... 68  |
| Carnatic Carp      | ...  | 29   | Etiropul Suratensis           | ... 64  |
| Carp, White        | ...  | 61   | Etiropul Maculatus            | ... 65  |
| Carp, Olive        | ...  | 62   |                               |         |
| Cashmere, trout in | ...  | 85   |                               |         |

| F.                   |         | PAGE | J.                        |      | PAGE |
|----------------------|---------|------|---------------------------|------|------|
| Fins, names of       | ...     | 143  | Japanese fishing          | ...  | 134  |
| Flies                | 163,    | 211  | Jardine live-bait tackle. | 24   |      |
| Flies, to preserve   | ...     | 183  |                           |      |      |
| Floats               | ...     | 165  |                           |      |      |
| Float-fishing, rough |         |      |                           |      |      |
| water                | ...     | 187  |                           |      |      |
| Fly-fishing, Mahseer | ...     | 21   |                           |      |      |
| "    Carnatic        |         |      |                           |      |      |
| Carp                 | ...     | 30   |                           |      |      |
| "    other fish, 39  | 42,     | 45   |                           |      |      |
| Fraserpet            | ...     | 203  |                           |      |      |
| Freshwater sharks    | ...     | 55   |                           |      |      |
| Frogs                | ...     | 132  |                           |      |      |
|                      |         |      |                           |      |      |
| G.                   |         |      | K.                        |      |      |
| Gaff                 | 171,    | 184  | Kadmane river             | ...  | 220  |
| Gairsoppa falls      | ...     | 219  | Kakankotta                | ...  | 212  |
| Gateprabha river     | ...     | 223  | Kala Nadi river           | ...  | 221  |
| Godavery river       | ...     | 225  | Kali river                | ...  | 228  |
| Gokak falls          | ...     | 224  | Kamardhari river          | ...  | 219  |
| Goonch               | ...     | 55   | Karachi                   | ...  | 233  |
| Grasshoppers         | ...     | 31   | Kashmir, trout in         | ...  | 85   |
| Ground baits         | ...     | 189  | Kemphulle river           | ...  | 219  |
| Gut                  | ...     | 158  | Ken river                 | ...  | 228  |
| Gut, to preserve     | ...     | 183  | Kettle, live-bait         | ...  | 173  |
| Gut, twisting        | ...     | 198  | Killing fish              | ...  | 141  |
|                      |         |      | Kistna river              | ...  | 216  |
|                      |         |      | Knots                     | ...  | 174  |
|                      |         |      | Kodikanal                 | ...  | 226  |
|                      |         |      | Kumaon lakes              | ...  | 229  |
|                      |         |      | Kushalgarh                | ...  | 229  |
|                      |         |      |                           |      |      |
| H.                   |         |      | L.                        |      |      |
| Hallyal              | ...     | 221  | Labeo                     | ...  | 59   |
| Harbour fishing      | ...     | 77   | Lachmanthirtha river      | ...  | 204  |
| Hardwar              | ...     | 229  | Landing net               | 172, | 183  |
| Hemavutti river      | ...     | 204  | Lateral line              | ...  | 143  |
| Hercules wire        | 12, 73, | 158  | Leaves, fishing with      | ...  | 32   |
| Hogankal             | ...     | 205  | Leads                     | ...  | 167  |
| Hogghly river        | ...     | 233  | Leeches                   | ...  | 135  |
| Hooks                | ...     | 165  | Line                      | ...  | 157  |
| Hooks, scale of      | ...     | 165  | Line, dressings           | ...  | 186  |
| Hutter river         | ...     | 202  | Live-baiting, Mahseer     | ...  | 54   |
|                      |         |      | "    other fish..         | 45   |      |
|                      |         |      | Live-bait tackle          | 45,  | 51   |
|                      |         |      | Londa                     | ...  | 222  |
|                      |         |      | Lutiánus Roseus           | ...  | 76   |
|                      |         |      |                           |      |      |
| I.                   |         |      | M.                        |      |      |
| Indian Gudgeon       | ...     | 63   | Madras, fishing near      | ...  | 234  |
| Indryani river       | ...     | 218  | Mahanadi river            | ...  | 226  |
|                      |         |      | Mahé                      | ...  | 230  |
|                      |         |      | Mahi river                | ...  | 227  |

| M—contd.                   | PAGE     | P—contd.              | PAGE    |
|----------------------------|----------|-----------------------|---------|
| Maheer                     | ... 8    | Phantoms              | ... 168 |
| Malprabha river            | ... 224  | Philibhit             | ... 228 |
| Malur                      | ... 214  | Pools, fishing in     | ... 19  |
| Mandegadde                 | ... 214  | Poona                 | ... 218 |
| Mandipla                   | ... 216  | Prawns                | ... 136 |
| Markandya river            | ... 224  | Pykara river          | ... 210 |
| Marked fish                | ... 147  |                       |         |
| Masulipatam                | ... 232  |                       |         |
| Measuring fish             | ... 195  | R                     |         |
| Meat, preservation of      | ... 190  | Rapids                | 16, 20  |
| Megalops Cyprinoides...    | 44       | Reels                 | ... 153 |
| Metapollium                | ... 208  | Rings, rod            | ... 161 |
| Mirga                      | ... 61   | Rods                  | ... 149 |
| Moyar river                | ... 207  | Rod joints            | ... 184 |
| Mullet                     | ... 73   | Rohu                  | ... 61  |
| Murrall                    | ... 50   | Rushkilya river       | ... 225 |
| Mula river                 | ... 218  | Rust, prevention of   | ... 183 |
| Muta Mula river            | ... 218  |                       |         |
| Mysore                     | ... 237  | S.                    |         |
|                            |          | Sabermati river       | ... 228 |
| N.                         |          | Sakrebail             | ... 214 |
| Nair fish                  | ... 68   | Sardah river          | ... 228 |
| Nellore                    | ... 236  | Sarju river           | ... 228 |
| Net, landing               | 172, 183 | Scale of hooks        | ... 165 |
| Netravuti river            | ... 219  | Seasons for fishing   | ... 194 |
| Nilambur                   | ... 226  | Seer                  | ... 75  |
| Noogoo river               | ... 214  | Seetul                | ... 63  |
| Notopterus Chitala         | ... 63   | Seringapatam          | ... 204 |
| "    Kapurat               | ... 64   | Sharasvati river      | ... 219 |
| Nottingham float           | ... 166  | Shimoga               | ... 214 |
|                            |          | Sholapadi             | ... 207 |
| O.                         |          | Shooting fish         | ... 139 |
| Olive Carp                 | ... 62   | Shrinking of Shikar   |         |
| Ootacamund                 | ... 101  | cloth                 | ... 196 |
| Outfit                     | 145, 174 | Silundia Gangetica    | ... 55  |
|                            |          | Siluroids             | ... 55  |
| P.                         |          | Silvering mixture     | ... 182 |
| Parson's live-bait tackle. | 23       | Sindh river           | ... 227 |
| Paste baits                | 62, 188  | Sivasamudram          | ... 205 |
| Pachisar                   | ... 228  | Smoking rock          | ... 205 |
| Pandri river               | ... 223  | Sone river            | ... 228 |
| Perch, rock                | ... 76   | Spawning of fish      | ... 241 |
|                            |          | Spinners              | ... 169 |
|                            |          | Splicing lines, etc., | 185—197 |



| S—contd.        | PAGE       |
|-----------------|------------|
| Split rings     | ... 161    |
| Spoons          | ... 161    |
| Spring balances | ... 193    |
| Striking fish   | 18, 48, 72 |
| Subramani       | ... 220    |
| Sulking fish    | ... 185    |
| Sutguttee       | ... 223    |
| Swivels         | ... 160    |

| T.               |         |
|------------------|---------|
| Tackle           | ... 148 |
| " box            | ... 180 |
| " makers         | ... 179 |
| Tadpoles         | ... 133 |
| Tamraparni river | ... 223 |
| Tanks            | ... 233 |
| Tellicherry      | ... 230 |
| Tengara          | ... 66  |
| Time for fishing | 28, 149 |
| Tirthahalle      | ... 214 |
| Tochi Valley     | ... 229 |
| Tonse river      | ... 228 |
| Topoor river     | ... 207 |
| Traces           | ... 158 |
| Trimmers         | ... 139 |

| T—contd.           | PAGE    |
|--------------------|---------|
| Trophies from fish | ... 190 |
| Trout in Nilgiris  | ... 101 |
| " Cashmere         | ... 85  |
| " Ceylon           | ... 78  |
| Tunga river        | ... 214 |
| Tungabhadra river  | ... 214 |
| Turtles            | ... 132 |

| V.                   |          |
|----------------------|----------|
| Varieties of Mahseer | ... 9    |
| Varnish              | 178, 183 |
| Vizagapatam          | ... 232  |

| W                     |             |
|-----------------------|-------------|
| Wallago Attu          | ... 55      |
| Waterproofing mixture | 186         |
| Weighing fish         | ... 193     |
| Whales                | ... 137     |
| White Carp            | ... 61      |
| Whiting               | ... 77      |
| Winch fittings        | ... 157     |
| Wire annealing        | ... 198     |
| " twisting            | ... 198     |
| " gimp                | 12, 43, 158 |



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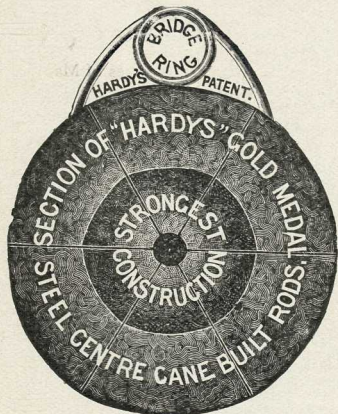
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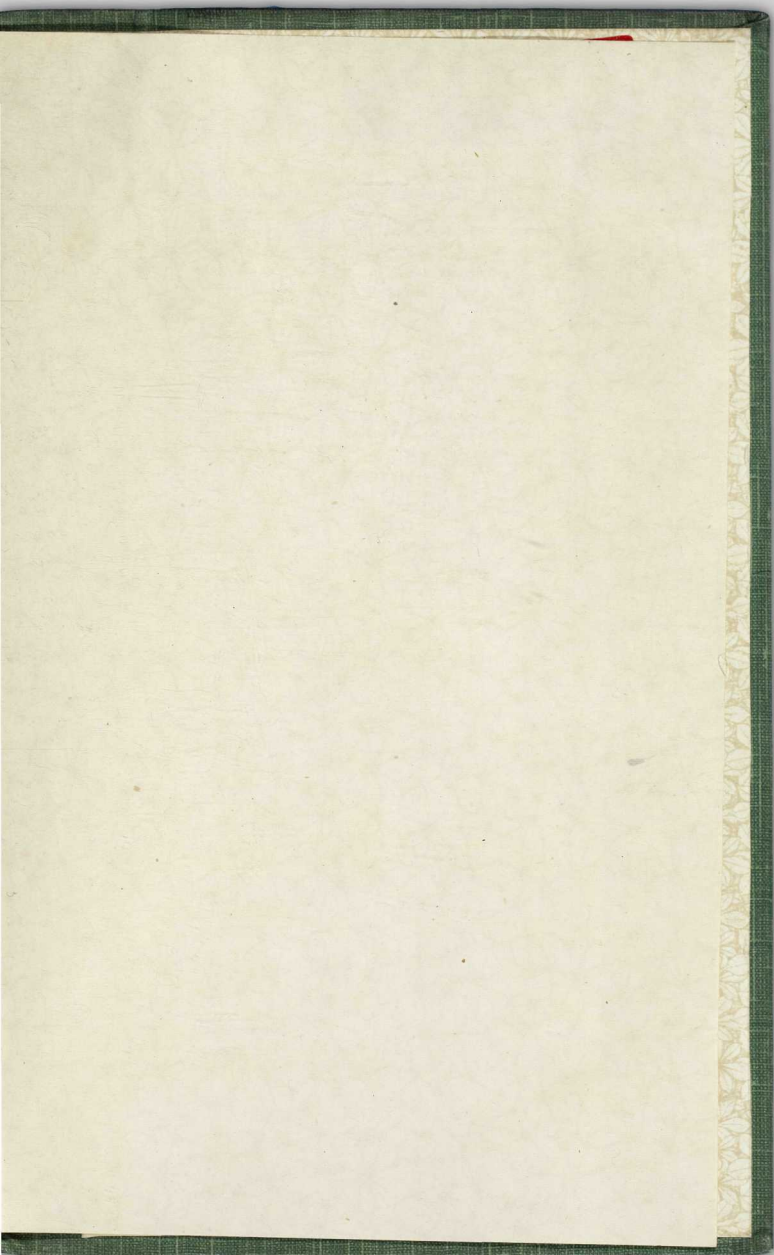
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